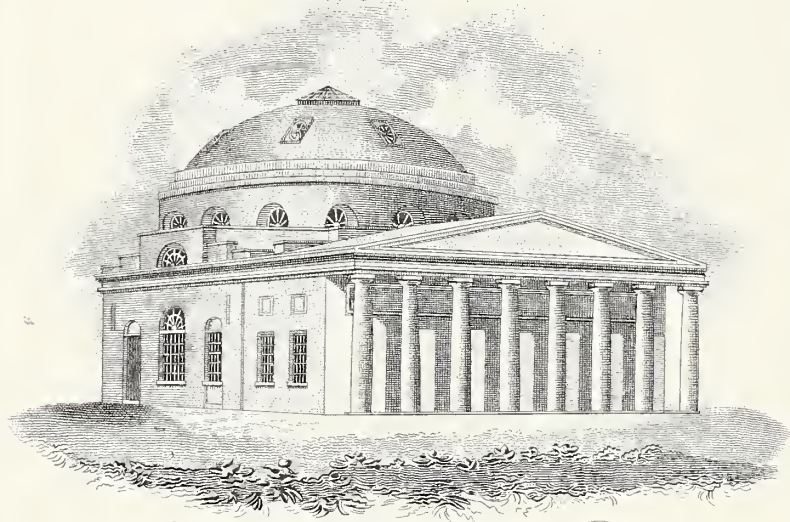



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The Journal

of the

Maine Medical Association



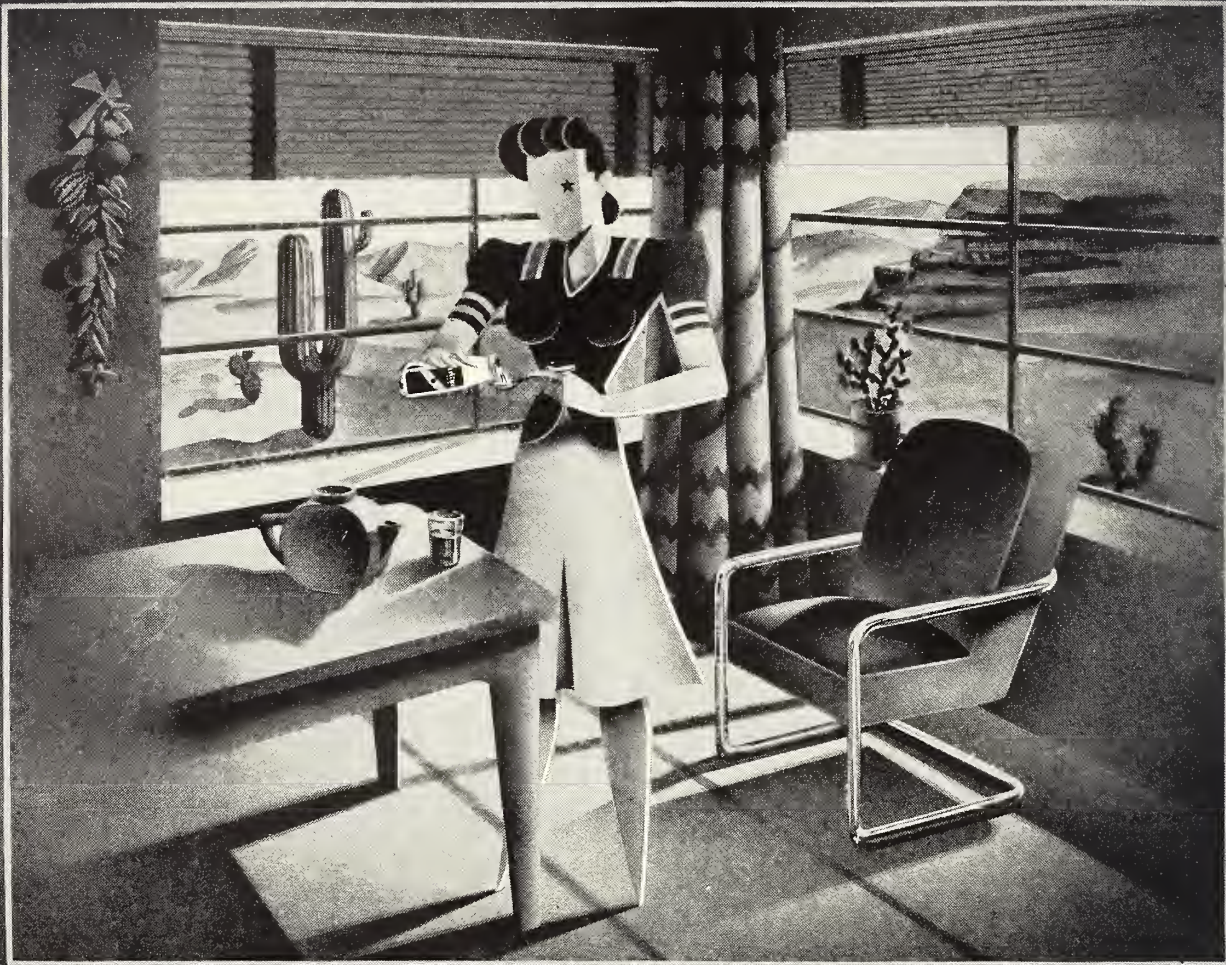
MAINE MEDICAL ASSOCIATION
The Eighty-ninth Annual Session will be held at
The Marshall House, York Harbor,
June 22, 23, 24, 1941

Volume Thirty-two

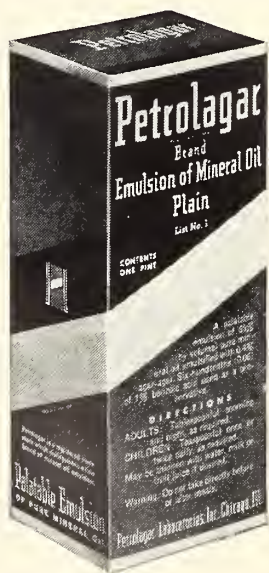
January, 1941

Number One

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The Journal of the Maine Medical Association

Volume Thirty-two

Portland, Maine, January, 1941

No. 1

*The Responsibility of Every Doctor to Provide Adequate Maternal Care**

By A. N. CREADICK, M. D., Associate Professor, Obstetrics and Gynecology,
Yale University School of Medicine

Connecticut is one of three states presenting the lowest maternal mortality rates. No special favors tend to make that state the safest for she has the same sparsely-populated, rural sections and populous urban manufacturing centers as others. We have large groups of various racial extractions. We do happen to have well distributed major hospitals and good highways. The factors contributing to produce the favorable result are: (1) high proportion of hospitalization of all maternity cases; (2) close coöperation and organization of all the men doing Obstetrics in the state; (3) a careful supervision of all bad results by the Public Health Committee of the State Medical Society and the Committee on Maternal Welfare of the State Department of Health. Lastly, continued efforts to popularize hospitalization, adequate prenatal care, etc., not only by the lay press and lay organizations, but by a well-organized public health nursing service, as far as we have been able to create it.

Far from being satisfied with the state figure of 2.5 to 2.8 in obstetrical results, the seven specialists who confine their activities

to the Private Pavilion of the New Haven Hospital, have conducted 10,000 deliveries with a maternal mortality of 0.6. This is lower than the estimated irreducible minimum set-up in previous reports. It may be argued that these private and semi-private patients are a selected group of higher economic status, are accorded better social and environmental conditions, and are willing to take all precautions to guarantee a safe outcome. Such arguments might hold true if it were not for the fact that during the same period the Out-Patient Service, provided by Yale University for free home delivery to the indigent and those on relief, has proven equally safe. An analysis of the mortality records shows that the disasters occur in the large middle group, stretching from those who strain every point to have the private doctors in their homes, up to those people who are well-to-do but who are inveigled into trusting the nearby but inadequately-equipped nursing home. The questions I hope to discuss with you today are: (1) What factors produce the good results in the hands of the well-trained specialists in a well-

* Read before the Annual Fall Clinical Session of the Maine Medical Association, October 17, 1940, at Bangor, Maine.

equipped hospital? (2) How can these be translated into services available to all? (3) What position the State Medical Society and the local medical organizations should take to further the improvement in obstetrical care. Once and for all, let me call your attention to the fact that it is no longer possible to dodge the issue by saying, "My patients cannot afford such care and what does the poor washerwoman or farmer's wife know about adequate prenatal care?" We, as a group, can no longer dodge the issue by such argument for if the care is not provided for everybody through organized medical channels, some federal, state, or local lay organization will assume this responsibility and dictate to the practitioner how it should be done.

SECTION I—THE FACTORS PRODUCING GOOD RESULTS

It is no use to say that the specialist in obstetrics in a well-ordered hospital performs ordinary obstetrical procedures with greater facility. It is true that he is performing these procedures more frequently than the average practitioner but he has had no better training to begin with. For one thing he is surrounded by all the safeguards, adequate sterilization, supplies, assistance, blood transfusion apparatus, blood banks, anesthetists, etc. As a matter of fact, I think the specialist in a well-ordered hospital is inclined to be more meddlesome than the private practitioner in a home. No, it is not alone better obstetrical skill. As the subject was analyzed by Dr. Miller of Hartford and myself in our original studies, it is (1) a better selection of those cases permitted to undergo pregnancy, (2) a far better acquaintance with the patient before, during and through labor; (3) more prompt interference when complications supervene and (4) that intangible known as obstetrical judgment.

Consider for a moment the proper selection of those cases permitted to undertake pregnancy. Holden demonstrated that repeated childbearing at too frequent intervals raised the mortality rate. Peters has become so exercised over the increasing damage to the chronic nephritic by reason of repeated pregnancies that the incidence of some control of fertility has become commonplace. From the

medical viewpoint it matters little how this control is accomplished but most conscientious practitioners refuse to interrupt a pregnancy already undertaken unless immediate danger to life exists. We all have seen healthy women deliver four or five children at the most rapid rate, but few have been able to review enough such cases to realize that hemorrhage and nephritic toxemia were more frequent in them. A good result cannot be obtained unless rigid supervision and control of the incidence of pregnancy exists where metabolic diseases are present.

One large factor in obstetrical practice is the associated, or antecedent extra-genital disease. When shall the healed tuberculous patient or the controlled diabetic be permitted to undergo a pregnancy? There are no hard and fast rules. I will admit that a cesarean can be done under local in the seventh month on a hypertensive with arrested tuberculosis and a thoracoplasty and both mother and child saved, but this is the exception and if you and I do many such cases from choice the mortality for mother and fetus will mount alarmingly. In the face of the study of Rynerson on mothers with diabetes and their offspring it is doubtful if we can blithely permit many such cases to undertake pregnancy. Any woman otherwise obstetrically sound whose diabetes has been controlled and still is carefully supervised can go through to term and as a rule produce a healthy child. A patient whose tuberculosis was minimal, unilateral, and arrested, who has been in good health for two years can be permitted to go through pregnancy and labor if she can take a slightly longer puerperal rest.

One-quarter of the mortality from obstetrical practice is attributable to the group called "toxemias." These cases range from the mild type of chronic nephritis to the fulminant eclampsia and it is frequently difficult to determine which is which. Good practice requires that a medical consultant acquainted with these complications should be available for consultation. For years the obstetrician has been preaching that these cases can be safely cared for as long as the symptoms are prodromal and the patient is being watched. As soon as a convulsion or

coma occurs the mortality mounts incredibly. Twenty-five years ago we saw from 12 to 15 eclamptics per annum. Now, we are called in consultation if the mild prodromal symptoms appear and no one of us has had a personal case develop convulsions in years. I seldom see an eclamptic any more. I should consider it blameworthy if a patient I had followed, developed true eclampsia or a nephritic went into coma undelivered.

Discussion of the restriction of the privilege of undertaking pregnancy naturally leads to the second point, namely, studying the individual case when she applies for obstetrical care.

In 1915 I first wrote specifications for adequate prenatal care. Dr. Williams first advocated routine Wassermanns that year. The Society for the Prevention of Maternal and Infant Mortality was formed. Many public and lay agencies backed by adequate statistics emphasized various features. Every year additional steps are taken to forestall accidents, foresee complications, eliminate sources of danger, and yet today few State Health Departments require even blood pressure readings and urine analyses. Despite all our efforts the maternal mortality rate throughout the registration area remained high and level from 1913 to 1928. Since the latter date our case is proven and the decline is general and progressive. There still remains a group that the program of education has not yet reached: Dr. Dailey, director of Maternal Welfare in the Children's Bureau, once said, "That the farther the patient lives from a maternity hospital the higher the mortality rate." This may explain one group. There is a similar group in dense urban areas which does not receive adequate care by reason of: (a) ignorance on the part of the patient, (b) indifference on the part of the doctor, (c) lack of instruction from health authorities.

Now the simple requirements for blood pressure readings and urinalyses and complement-fixation tests have been supplemented by general physicals, complete blood counts, the use of a weight chart, use of Vitamine B₁, A and D, and lately K; the care of the teeth. Pelvimetry by X-ray has long ago superceded external measurements.

The third point in improvement requires

a little more medical thought, viz., the increasing tendency for operative interference when complications arise. Undoubtedly, the incidence of operative delivery is rising. We still do not possess an efficient, safe, reliable oxytocic for the medical induction of labor. The many surgical devices for emptying the near-term uterus from below, such as the Bougie and Vorhees bags, instrumental and manual dilatation, are crude, risky, slow and require a certain amount of skill and manipulation. Cesarean Section is simple in the hands of one who knows when and how to do it, but it is all too frequently a last resort after manipulations, after other operations have been attempted, and vaginal examinations have been made. Sometimes the case, without an honest history, is referred to a nearby surgeon to take the blame. The entire program rests on the training of obstetricians, developing through experience and study good obstetrical judgment, providing adequate accessible hospital facilities, then educating and encouraging the laity to avail themselves of them.

SECTION II—THE IDEALS OF PERSONNEL AND PLANT

I suggested to you that I could offer you a program that is practicable, in which you all might coöperate. For instance, such a program as I would have instituted, had I controlled the Maternal Welfare Funds of the Social Security Act. In order to do this I shall be required to resort to some figures. I shall try to make them simple and striking so that you need not be confused. There should be about one well-trained obstetrician to every 2,000 persons. Since the facilities for adequate training do not permit developing this number at present, we must establish centers to accommodate the men we have and make those centers available to larger groups of patients by improving transportation.

There are about 15,700 deliveries per annum in Maine. To hospitalize 80% of these would require 900 beds. These beds must be grouped by density of population and rates of fertility. A hospital in a focal center of population can serve an area of 1,600 square miles of average density. By

common consent it would be better for the local medical group, or the hospital staff, to choose from their number, two men who by training or taste should become obstetricians. These men should alternate in periods of training and it should be specified that such training should be real and honest. These men could then share the burden of a ward service and become the obstetrical consultants for the area. It is not to be presumed that they would do all the normal cases for the district, but they should be called in consultation for all complications requiring services beyond low forceps and episiotomy. The obstacles to the program are found in pettiness, jealousy, and shortsightedness on the part of the physicians themselves. I am not holding a brief for specialists as contrasted with general practitioners. The average family doctor is a far abler, more versatile, more useful man than the specialist. My only contention is that a general practitioner, doing midwifery at maybe 10 cases a year and seeing complications once in 10 years, is not going to meet them when they arise with any assurance or facility. The cost of the program does not require astronomical New Deal figures. If the state was required to pay the hospitalization of the whole number it would mean less than a million dollars. That's the equivalent of a tax of 4c a pint on the patent medicines sold in the backwoods.

SECTION III—IGNORANCE AND FEAR

We have the pilots and have discovered the best channel, now collect the burdened fleet and encourage them to take the course. That means discover the patients and stimulate them to get in contact with the doctor and the hospital. Immediately we meet time honored fetishes and shibboleths.

Pregnancy should be and, thank goodness, usually is, a normal, welcome, physiological event. It is time we put the soft pedal on the "descent into the Valley of the Shadow of Death." I am conscious of the pain and the travail but I am also party to the joy and happiness that follows a fortuitous outcome. Admittedly the margin between safety and jeopardy is narrow. The patient can lapse, as you all know, from a state of well being to

one of gravest import without appreciating a single symptom herself.

If we continue to wait for these patients to have symptoms, headache, blindness, girdle pains, edema, suppression of urine, the damage has been done and the morbidity and mortality rise rapidly. The Metabolism Department makes the observation that if these patients are delivered before the albumin appears and the blood pressure is still under 150 systolic and the heart is still compensating, there is little added danger, but the mortality rapidly rises to 15% with the onset of graver symptoms and after the first convulsion, doubles that. Besides, the methods of delivery become more restricted and, consequently, both the fetal and maternal mortality mounts.

You are all more or less acquainted with these facts and you, as do I, hear "I'm afraid to see a doctor." "I didn't know I ought to be examined." "I am free from symptoms, I feel all right, why should I go to the doctor?" This point of view is unfortunately often furthered by the family physician who minimizes the risk.

Pregnancy then, which is the perfect representation of man's creative instinct, fraught with peril if not carefully watched, is handicapped by fear, unfamiliarity, and freedom from warning symptoms. This fearful, shy, unfamiliar and symptomless group crosses all economic and social lines. I must admit that the oldest girl in a large family, when her turn comes, is not altogether uninformed upon the "facts of life," but she does not know the value of adequate prenatal care.

A program of education is required to make common knowledge of the hazards of pregnancy and the safety to be derived from proper care. Such a program can only reach its full usefulness with a corps of visiting nurses.

SECTION IV—WHAT HAS BEEN DONE ELSEWHERE

Some years ago we began a demonstration and a description of that project should form the body of this paper.

In the first place the record of one of our counties looked worse than some of the others,

at any rate it was slightly less populous, away from large urban centers, and we recommended a study of this county. Now it is only fair to state that we would have been delighted if our work in that county had demonstrated the cause and cure of maternal mortality. Unfortunately, for the Social Security Act, before we could get our study started the rate fell to the lowest for any of the rural counties.

It is so heartening when statistics fit into your preconceived ideas and so difficult to explain when they do not. The most dangerous deduction in Science is "post hoc ergo propter hoc." Your statistician will explain to you that our sample was really small and our rate of childbirth low, therefore, rates in single years can be materially altered by a small number of unexpected casualties. One must measure trends in terms of greater or less deviation from the chance possible variation.

When it was indicated to the Medical Advisory Committee that Social Security money would be available certain stipulations were made: (1) That small areas should be attempted in concentrated manner, rather than a diffusion over a large area. (2) That the program be jointly sponsored by State Health officer and the State Medical Society. (3) It was further stipulated that no project would be undertaken which could not be maintained by the individual community if the original source of funds failed and if the project had demonstrated a need and a value.

First, a force was organized in the central office of the State Department of Health to supervise this and other efforts of a like nature. Secondly, Windham County was chosen for our first efforts and a survey made. Efforts at enlisting local medical support met with success, and a small corps of public health nurses was secured.

It is unwise to underestimate the value of the coöperation afforded by the hospital administrations and the leaders in medical circles in local ranks. Furthermore, the various social agencies in the county participated in a program for the information of the laity. The first survey was made in the Spring of 1936 and subsequent surveys have been made. Each time we have made an effort to deter-

mine the adequacy of the ante-partum and post-partum maternal nursing care, to determine changes in type of this care, to measure the effectiveness of the educational campaign and to suggest further improvement. The story of our experiences may be followed on the graphic charts. It is not yet complete by any means, but a few points may be brought out. The maternal mortality in the area, 1930-34, inc., ranged from 4.5 to 12.5, average 8.8. The mortality rate 1935-39, inc., ranged from 2.4 to 2.7, one year 6.3, giving the average of 3.3 for the five-year period. At the time our program was instituted, 40% of the deliveries were hospitalized—now 65%. The neonatal mortality has dropped materially. One graph makes an interesting contribution; that which shows that the moment the public health nursing service, under the Social Security Act, was diminished by reason of the fact that a portion of their time was deflected to crippled children, there were not enough local nursing agencies to make up the loss. Consequently, the county is not yet able to assume the burden if social security funds are applied to another area.

Except as part of the general program for publicity and education, it is my personal opinion that the refresher courses were not the best solution for Connecticut and Windham County. Having been one of the lecturers, this is maybe unbecoming of me. For a general principle applicable by the Children's Bureau to a similar situation in another state for instance, I should suggest that if the local hospitals detailed one or two members of their staff to take a post-graduate course in Obstetrics and thereafter assume responsibility for the Obstetrical Service and obstetrical consultations in their vicinity, the same amount of money would be invested to better advantage.

V—STUDY OF STATISTICS

Having improved the training and numbers of the medical attendants, having increased the number of hospital beds, and improved the units devoted to obstetrical care; further, having devoted some time to the institution of an adequate number of public health nurses, collecting the cases,

transporting them to the nearest attendant, developing adequate nursing care for pre-natal intra-partum and post-partum care, we now turn our attention to various moves to improve:

- a. The supervision by the public health officials.
- b. The study of the individual case records, the distribution of the types of disease.
- c. The formation of study units in each county, in each hospital, and each medical center to analyze the mortality rates for their district.
- d. The institution of a program to inform the laity of the purpose and need for the whole procedure.

Unquestionably the management of a state-wide program should remain in the hands of a state health officer in coöperation with the State Medical Society. No other official or organization can apply wise criticism and plan large scale projects by districts. The state health officer should have a medical supervisor for maternal and child welfare. He has his own statistician and the registrar of vital statistics tabulates the cases from which the rates are figured. The responsibility for the use or dissipation of public funds should rest on able shoulders.

To an audience of people interested in public welfare, a great many of these specifications that I am outlining are tried, accepted, well known, merely recited for the purpose of being complete. Under the heading of study units with various political subdivisions, county organizations, hospital staffs, city medical societies, etc., a great deal of this sort of thing already exists, has been done, and is well understood. Nevertheless, no longer ago than last summer the department of health of the State of New Jersey made a distinct contribution to their study by instituting a picture of their problems by counties according to the various subdivisions in causes of death. In that instance, rural counties with insufficient medical attention demonstrated their inadequacy to cope with the toxemias, while the densely populated urban centers suffered more from accidents of pregnancy and hemorrhage.

I have said that the medical men are their own severest critics. All good hospitals now maintain committees to study, criticize and classify "Causes of death." Each county society, each local medical society, each organization of obstetricians licensed by the Board should study the figures of their local geographical unit, and make recommendations for improvement. With the service offered for consultants, with the establishment of transportation facilities, with provisions to subsidize hospitalization, it will be difficult in the future to justify doing a version in a private home or handling a separation of the placenta or placenta previa, unless typing, transfusion technique and material, including a donor, or a blood bank is available.

No improvement in the handling of any great medical or public health program has ever been accomplished without the backing of a large body of lay public opinion. It is only necessary to cite the accomplishments of the mental hygiene, national tuberculosis and other like movements to verify this statement. The other alternative is to prove the value of typhoid prevention by demonstrating the benefits on sample groups. During periods of crisis, one can arbitrarily treat large bodies like armies, but in most instances it requires long, slow, general education of the laity through women's clubs, service organizations, churches, etc. One difficulty in such a program is to realize that it must be sustained over a long space of time to be successful, so that the novelty of today becomes the routine accepted procedure a generation hence.

Each study made consistently points to one inescapable conclusion—maternal mortality arises in great part from causes that are controllable. I realize that you have problems of population, distribution and character that are unique. I also realize that no pattern proven successful in one area can be imposed on another with equal success. But there are fundamentals and experiences in such a problem that are applicable. Just how they will be used in this state is the challenge that confronts the physicians and public health officials.

*The Place of the Hospital in a Continuation Program of Graduate Medical Education**

By FREDERICK T. HILL, M. D., D. Sc., Thayer Hospital, Waterville, Maine

The big problem confronting Medicine today is the development of an effective program of Graduate or Continuation Education. I shall try to show you the need for such a program, its importance to the hospital and the necessity of the hospital assuming, to a large extent, the responsibility for it, if it is to succeed.

Medicine is not an exact science. It is a constantly changing one—actually the accumulation of many years' experiences and the results of vast numbers of researches. We are constantly forming new conceptions of many Disease problems. Ideas which were accepted as facts a few years ago may now be disproven. Procedures which were routine may soon become obsolete. New methods of diagnosis and of therapy replace the old—as we further progress in our knowledge of Medicine. Yet there is no legal restriction upon any physician, once duly licensed, to prevent him from practicing Medicine with the same mental equipment he possessed upon graduation, no matter how outmoded it may be at present.

Our system of Medical Education is somewhat unbalanced. We concentrate everything upon the four medical school years and pay relatively little attention to the tremendously important thirty or more years when the physician is in active practice in a constantly advancing Profession, often invested with the responsibility of Life itself.

Good medicine means Modern Medicine, utilizing every scientific advance which may be of benefit in the cure of disease conditions, or which may alleviate human suffering. It means using every new development which may eliminate unnecessary risk and further safeguard the patient. We must admit that this condition is not universal today throughout the Country. In some places medical conditions are beyond criticism but in others the available medical service is far from the best.

Good medicine, Modern Medicine, de-

mands constant study on the part of the physician;—consistent reading of contemporary medical literature, attendance at meetings of National and Sectional Scientific Societies, visiting clinics and teaching centers and active participation in hospital staff programs where the professional work is carefully analyzed and evaluated. In other words, keeping up-to-date. These opportunities do not come equally easy to all men. And all men do not possess the same desire to make use of them. Unfortunately too many are satisfied to carry on with the same mental equipment they had on graduation. This is largely responsible for this variation in the quality of medical service available throughout the Country today.

Recently we have been waking up to this glaring deficiency in our educational program, and efforts are being made to improve conditions. But we have not as yet got the solution. The number of different programs—experiments if you will—which have been and are being tried throughout the Country indicates this.

Here in Maine we are accomplishing a good deal by means of the Fellowships provided by the Bingham Associates and the Commonwealth Fund which enable us to send a certain number of men away each year for short post-graduate courses. But admirable as these are, and we are most fortunate in having them available, they fall far short of what is most desirable. Of necessity this type of education is a form of spoon-feeding. It's all right as a starter—as an incentive—but does not compare with that best type of education, which is Self-Education. And the scope of these Fellowships is necessarily limited. We cannot hope, through these, to reach all the needy localities. Last year for example post-graduate courses were given to 58 of our physicians.

We have estimated that about 10% of the physicians in Maine are satisfactorily carry-

* Presented at the annual meeting of the Maine Hospital Association, August, 1940.

ing on their own continuation program of education. About 15% more have received the benefits of these Fellowship courses. A good number of these may be expected to continue their own educational program. Of the remaining 75% probably one-third are too far advanced in years for much to be expected of, and another third are quite beyond being awakened from their lethargic state by any means at our command. Only Time and Death will take care of this 50%. Our problem is with the remaining 25% and the new men coming along. How can we consolidate the gains we have made and develop a more effective, far-reaching program for the Future?

Here is where the Hospital must come in. It is taken for granted that the Hospital will furnish needed beds and other facilities for the community which it serves. What is not generally realized is its far-reaching effect upon the standards of clinical practice throughout the locality. Almost every improvement in the standards of practice, outside of the large teaching centers, may be directly attributed to the influence of the Hospital. With present-day transportation most physicians, even in the smaller isolated places, have more or less association with hospitals. Even if they only take their more serious cases to some nearby available hospital, they nevertheless become exposed to its influence and this, in turn, becomes reflected upon their own clinical work outside. And this naturally becomes much more marked upon the members of the hospital staff itself. This far-reaching influence then carries with it certain responsibility which the Hospital cannot dodge.

The demand for improvement in hospital standards did not originate with the hospitals themselves. It came first from certain elements in the Medical Profession but the hospitals accepted the challenge, adopted certain standards and are now in the position where they insist upon a high quality of practice from the physicians. By assuming this position the Hospital becomes more or less responsible for the character of the medical service in any community. Therefore it would seem perfectly logical to expect the Hospital to become vitally interested in a Continuation program of Education, to in-

sure for always that the best of medical service be available. It would seem logical to expect the Hospital to provide such a program and to insist upon its being followed by its staff.

This idea does not require a large so-called teaching hospital. It can and should be applied to the community hospital. There is no monopoly, as yet, on mental activity. By decentralization of this educational program we can best get the improvement in available medical service where it is most needed. Thinking is apt to be contagious, and when we get group thinking in a staff we are making progress.

Every hospital should have a well-organized staff and conduct regular frequent staff meetings which will be teaching in character. The clinical work should be carefully analyzed and evaluated. This means thoughtful preparation of programs. Guest speakers, with something worth-while to present, may occasionally be included but this should not be allowed to displace in any degree the active participation by the staff members—for the greatest value is in Self-Education. It has been rightly said that the most important post-graduate studies which the physician is likely to get are the daily discussions of cases with his confrères in the hospital, and the more formal discussions in the staff meetings. It is impossible to estimate the educational and ethical influences which these conferences may have upon the Medical Profession.

In addition proper reading habits on the part of the staff should be encouraged. One way to do this is by having readily available in the hospital certain of the better medical periodicals. Another is the gradual acquisition of a library of worth-while medical books. Attendance at National and Sectional meetings should be fostered, and members attending should report the proceedings back to the staff. Members should be encouraged to visit other clinics and teaching centers and to take needed post-graduate courses. This may require some degree of persuasion at first but once the group is ocultated, it becomes almost endemic.

If such a program is to continue most effectively it must be centered in the Hospital. The Hospital must provide constant stimulus. It must strive to maintain as high a standard

of educational program as it does of clinical work. One reflects the quality of the other. The time should come when all staff association, even that loosely applied term of Courtesy Staff, be limited to those physicians who can demonstrate that they are practicing Modern Medicine with all it implies. No longer should the facilities—or as is sometimes the case, the favors of the hospital—be bestowed upon the practitioner whose only qualification is the ability to fill the private rooms with paying patients. The time should be past when the hospital makes a business of letting beds and rooms to physicians in which they may practice such medicine as they please. More and more the Public is looking to the Hospital, and the Hospital in turn must assume the responsibility for its patients—to see that they are safeguarded in every way and receive the best, the most modern medical care. It should not be Dr. Jones' patient, something sacrosanct, not to be ever interfered with; but the hospital's patient with Dr. Jones in professional attendance. This thought does not mean that the Hospital is practicing Medicine. No hospital, worthy of

that name, would countenance a break in aseptic technique in the operating room, or stand for ill-advised or unnecessary surgery. The Hospital has already—at least to a certain degree—accepted this idea of responsibility for the patient. It does not mean that, without any equivocation, the Hospital, through the collective minds of its staff, has the duty of seeing to it that only the highest standards of medical practice are carried on within its walls. Then, this being the case, it is only fair to expect the hospital to provide the necessary facilities and encourage, nay demand, the development of a Continuation program of Education, as the best possible means of making the available medical service satisfactory.

In conclusion I would say to the hospitals:—There is a baby on your doorstep. It's a baby which bids fair to become of inestimable benefit to all concerned, the Hospital, the Medical Profession and Humanity. The medical Profession admits its paternity but doubts its ability to bring it up. It's on your doorstep. What are you going to do about it?

Efforts to eradicate tuberculosis should not be spread thin like butter over bread.—LOUIS I. DUBLIN, M. D., *Metropolitan Life Insurance Company*.

Every hospitalized case of open tuberculosis in an employee reduces the possibility of a disabling infection in an industrial physician's plant.—LEROY U. GARDNER, M. D., *Surgery, Gyn. and Obstetrics*, Feb., 1939.

The death rate from tuberculosis for the entire United States for 1938 was 48.6% per 100,000 population which is 9.3% below that of 1937 and the greatest single annual decline in three decades, except for the phenomenal fall in the death rate just after the war in 1918. This figure was obtained by direct cor-

respondence with health officers of various states.—J. S. WHITNEY, *Amer. Rev. of Tuber.*, Aug., 1939.

Because tuberculosis is found 13.5 times as often in families of known cases as in the general population, we should look for tuberculosis in the homes of persons who have it.—*Crusader*, May, 1940.

All negro patients registered with the Providence Hospital Clinic in Chicago—30,000 in number—are to be X-rayed within the next year in a search for tuberculosis. The families of those who have the disease will also be X-rayed. The project has received a grant from the Julius Rosenwald Fund.—*Survey*, Jan., 1940.

Cardiac Drugs—Their Rational Use*

By WILFRED J. COMEAU, M. D., Bangor, Maine

The rational use of cardiac drugs can do much in alleviating the distressing symptoms of heart disease and, of equal or even greater importance can, in many instances, rehabilitate the incapacitated individual so that he can lead a reasonably normal and useful existence. There are relatively few drugs which are needed in the treatment of most cases of heart disease, but few as there are, their value and their use is often misunderstood. The following discussion will attempt to summarize the practical aspects of our knowledge of the cardiac drugs which are of fundamental importance.

DIGITALIS

Although digitalis is one of the oldest and most valuable drugs now used in the treatment of heart disease, it is also one of the most misunderstood. This usually results in its use by many physicians both in insufficient dosage and in conditions in which it has no value whatsoever. The main indications for the use of digitalis are only two:

1. *Heart failure*, either left ventricular failure with the predominant symptom of dyspnea, either at rest or on exertion, or right heart failure with congested neck veins, a congested liver, and dependent edema as dominant signs;

2. *Cardiac arrhythmias*, and of these by far the most important is auricular fibrillation.

In regard to the former it is well to remember that heart failure cannot exist without cardiac enlargement. Furthermore, it is true that many individuals who complain of dyspnea or swollen ankles have no heart disease. Shortness of breath is a common complaint of the obese, the elderly individual, the person who is in poor general condition, and it is frequently encountered in nervous women and particularly during the menopause. Edema, similarly, is more commonly

caused by varicose veins, old phlebitis, and obesity than by heart disease. The majority of these people have no heart disease and the prescribing of digitalis for these symptoms or signs serves no useful purpose whatsoever, unless the heart is definitely responsible for them. Similarly, it is unwise to use digitalis for the post-operative patient who is not doing well in general, since it does no good and may actually be harmful. On the other hand, even if a patient has no cardiac symptoms but has a big heart, digitalis is often useful in forestalling and postponing the heart failure which would supervene much sooner if the drug was not utilized in this prophylactic manner.

Auricular fibrillation should always be controlled with digitalis when heart disease is present. In such cases digitalis should be given in sufficient dosage to reduce the cardiac apical rate to 70 to 80 beats per minute and the drug must then be continued in an adequate dose to maintain that level. In paroxysmal auricular fibrillation without heart disease quinidine sulphate may be tried first but digitalis should be employed if this drug fails in reverting the cardiac rhythm to normal. Of the other cardiac arrhythmias, auricular flutter is the only one in which digitalis may be the drug of choice. It is also used in some of the other less common cardiac irregularities but usually as a second resort.

Digitalis is often prescribed in insufficient doses. Almost without exception, if a patient needs digitalis at all, it is needed in a digitalizing and maintenance dose, and furthermore, it is needed for the remainder of the patient's life. The use of small doses of digitalis without digitalization is rarely of any real value.

Usually grains $1\frac{1}{2}$ per ten pounds of body weight plus grains $1\frac{1}{2}$ for each day of digitalization given in several divided doses over a period of several days, depending upon the urgency of the situation, will digitalize the average person; grains $1\frac{1}{2}$ daily thereafter

* From the Medical Service of the Eastern Maine General Hospital.

is the usual maintenance dose. Well standardized tablets of digitalis leaf (grains $1\frac{1}{2}$) is the best form to employ generally. It should be remembered that some individuals require more or less digitalis than others and consequently both the usual digitalizing and maintenance dose must sometimes be modified. It is rarely necessary to completely digitalize a patient in 24 hours, and by taking three or four days or longer to complete this process, untoward symptoms from the drug are often avoided. Most instances of intolerance to digitalis are due more to its improper use with resultant too rapid or over-digitalization than to any idiosyncrasy to the drug. It is only a rare individual who cannot tolerate digitalis in Therapeutic doses.

Finally it can be said that by and large digitalis is a relatively harmless drug when used rationally. The untoward symptoms of anorexia, nausea, vomiting, etc., which sometimes cannot be avoided temporarily are disagreeable to the patient but not harmful. In the occasional patient who has an idiosyncrasy to the drug and cannot tolerate it even in small doses, the digitalis effect can be produced and tolerated by the use of one of the preparations of squill (Urginin, Scillarin) which are employed much in the same manner as digitalis. These drugs are of secondary choice but an extremely valuable adjunct to our cardiac armamentarium for those individuals who urgently require the digitalis effect but who are intolerant of that drug.

DIURETICS

Mercurial Diuretics

The most valuable contribution to cardiac therapy since the establishment of digitalis as a cardiac drug was the introduction of the mercurial diuretics (Mercupurin, Salyrgan). The possibilities for the use of this medication are, unfortunately, still not fully realized by many physicians. The value of the mercurial diuretics in individuals with edema is generally appreciated but few realize the benefits that can result in patients with acute or chronic left ventricular failure without edema.

Individuals with chronic or acute dyspnea and cough who do not respond completely after digitalization are frequently completely

relieved after several injections of a mercurial diuretic. Furthermore, individuals in left ventricular failure and incapacitated by chronic pulmonary congestion and dyspnea can frequently be relieved and returned to a limited ambulatory regime by the periodic injection of these diuretics. The timing of the injections is helped by the periodic weighing of these patients and the determination of the weight at which symptoms and signs usually occur. Injections are then given just before that weight is attained. It is consequently well worth while to employ these diuretics in patients who have no dependent edema but who are constantly threatened with left ventricular failure.

The preparations available are dispensed in 2 cc. ampules which can be given intravenously or intramuscularly. Rectal suppositories are also available. The intravenous route is by far the preferable since it gives the maximum results. The intramuscular route is less effective and should be employed only when venipuncture is impossible. The suppositories are the least effective but since they can be self administered after instruction, they are sometimes quite valuable when it is difficult for the patient to make frequent visits to a physician.

A few practical suggestions about the intravenous use of these diuretics follow. A sterile 22 or 23 gauge needle is preferable. The needle *must* be well in the vein and the injection should be moderately slow. During the injection the diuretic solution should be diluted with the patient's blood by repeated withdrawals into the syringe of several cubic centimeters of blood. It is also wise to withdraw several more cubic centimeters of blood after the injection is completed and reinject this as a washing procedure for the vein. Ammonium chloride in doses of 60 to 90 grains for a few days preceding the injection sometimes increases the diuresis.

The dangers from the use of these mercurial diuretics are few. An occasional individual has an idiosyncrasy to one or the other of the commercial preparations, but rarely to both. These reactions are uncommon and usually mild in nature. Even the more alarming reactions are rarely fatal. As a precaution it is wise to give only 1 cc. of the diuretic as the first dose to safeguard against the pos-

sibility of a severe reaction; employing the full dose of 2 cc. subsequently if all goes well. As stated above, changing from one preparation (Mercupurin, Salyrgan) to the other is often helpful if a reaction occurs or if one preparation seems to be losing its efficacy.

Of paramount importance in giving the drug is the necessity of the needle being well in the vein since the substance is extremely toxic to the subcutaneous tissue and can result in a very painful local reaction and even in necrosis if by mischance a considerable amount of the drug fails to enter the vein. A little extra care in venipuncture will completely eliminate any such occurrence. Thrombosis of the vein is rare if the injections are given slowly and the solution well diluted as outlined above. Repeated injections into the same vein over a long period of time may result in local venous thrombosis or sclerosis but these are usually of little clinical importance.

In regard to the kidneys there is substantial proof that these mercurial diuretics are harmless except in patients with acute kidney disease. They should be avoided in any acute kidney infection and particularly in acute glomerular (hemorrhagic) nephritis. These diuretics do not produce kidney damage in a normal kidney nor is there any evidence to indicate that they cause further damage in chronic kidney disease. Albuminuria is not necessarily a contraindication to their use. It is the general opinion that except for the acute conditions mentioned above the mercurial diuretics can be given frequently and in full doses over long periods of time without any fear of causing kidney damage.

Oral Diuretics

There are a number of oral diuretics available including the various theophylline and theobromine salts, urea, ammonium chloride and others. Their efficacy is undependable and they have a considerable tendency to upset the stomach. Occasionally a patient will tolerate one or the other of these and obtain a significant increase in diuresis. In such individuals the sole use of an oral diuretic or its use between injections of the mercurial preparations may be helpful. In general, however, the value of these oral preparations

is limited and usually disappointing, and cannot replace the more potent mercurial forms.

NITROGLYCERINE

A discussion of the value of nitroglycerine necessitates first a clear differentiation between angina pectoris and coronary thrombosis, since nitroglycerine is of great value in the former and of no value, even dangerous, in the latter. It should be realized that angina pectoris is largely due to temporary functional changes whereas coronary thrombosis is actual obstruction in the coronary circulation resulting usually in destruction of heart muscle.

Briefly the clinical features of angina pectoris are repeated attacks of mild to moderate substernal or high epigastric pain, pressure, or discomfort with or without radiation to the arms associated invariably with exertion or physical activity and not infrequently with excitement and the ingestion of food. It is of brief duration (several minutes) and quickly relieved by rest.

Coronary thrombosis, on the contrary, is a sudden isolated prolonged (half hour or more) attack of pain similar to angina pectoris but of much greater severity, often occurring at rest and frequently accompanied by symptoms of circulatory collapse (falling blood pressure, tachycardia, ashen cyanosis, and profuse cold perspiration). In this condition opiates in sufficient dosage to relieve pain should be given immediately, and prolonged complete bed rest should be advised.

Nitroglycerine is valuable in angina pectoris because it causes vasodilation of the coronary arteries, thus supplying the temporary functional demands of the myocardium for a more adequate coronary circulation. Its use is not only limited to the actual attacks of anginal pain but it is of considerable value when used prophylactically in anticipation of a possible attack of angina pectoris. Patients with this condition soon become familiar with the precipitating conditions of an attack and their limits. A tablet of nitroglycerine taken before these limits are reached will frequently abort an attack which otherwise would have occurred. This "anticipatory" or "prophylactic" use of nitroglycerine frequently allows a patient to become more active without dan-

ger, and at the same time, to be much more comfortable. Individuals with frequent attacks of angina pectoris including angina pectoris decubitus can sometimes be helped by taking frequent small doses of nitroglycerine regularly throughout the day.

From the practical standpoint it has been found that a dose of grains 1/200 of nitroglycerine is usually just as effective as the traditional grains 1/100 and has the advantage of reducing the undesirable side effects of the drug, i. e. headaches, flushing, palpitation, etc. A fairly fresh and quickly soluble form of the drug should be prescribed and should always be immediately available to the patient.

THE ORAL CORONARY DILATORS

In the past few years Aminophyllin and similar derivatives (Thesodate, Theophyllin, Calpurate, etc.) have been employed widely to increase coronary flow in coronary heart disease, particularly with angina pectoris. Sound, well controlled observations based upon electrocardiograms and exercise tolerance tests exist which indicate that these drugs are of some value in increasing the efficacy of the coronary circulation. On the other hand, clinical observations based upon the reports of patients usually prove disappointing. It is only the occasional patient who feels that his symptoms have been significantly alleviated by the use of one of these drugs. This is true even in those patients in which the experimental observations mentioned above indicate a considerable improvement in the efficacy of the coronary circulation. It would seem then that these drugs do have some beneficial effect on the coronary circulation, although more often than not, they prove disappointing from the subjective standpoint of the patient. These drugs are always worth a trial of several months in any patient with angina pectoris which proves difficult to control and their continuance after that time will depend upon the judgment of the physician and the patient as to their efficacy.

QUINIDINE SULPHATE

The conditions in which quinidine sulphate is most valuable frequently necessitate an electrocardiographic diagnosis and usually

several electrocardiographic follow-up studies. In view of this a thorough discussion of this drug would involve details which might easily prove confusing and consequently, only a few general suggestions in regard to its use will be mentioned.

First, it should be emphasized that quinidine sulphate is a drug less dangerous than its reputation implies. In general it should not be used if congestive heart failure exists. Otherwise its potential dangers are limited almost entirely to its use in large doses (30 or more grains daily) in individuals with coronary heart disease. Following such cases with frequent electrocardiograms to discover early evidences of myocardial intoxication, and stopping the drug if such evidence appears can practically eliminate any such dangers. The danger from the dislodgment of emboli has been overemphasized. A 3 grain dose should first be given, if extensive therapy is contemplated, in order to test for any idiosyncrasy to the drug.

Quinidine sulphate is a relatively innocuous drug in small doses of 3 grains, three to five times a day, and sometimes proves very valuable in preventing or diminishing premature beats and attacks of the various paroxysmal arrhythmias. In larger doses, 30 to 50 grains in divided doses daily for limited periods, it is helpful in controlling established attacks of the paroxysmal arrhythmias. It is the drug of choice in ventricular tachycardia. In auricular fibrillation with organic heart disease it should be used only in certain selected cases.

As a general rule it can be stated: 1) that with judgment quinidine sulphate can be used freely in small repeated daily doses for long periods of time without undue danger; 2) in larger doses the danger is negligible if the condition is functional and the heart organically sound; 3) if organic heart disease is present, and large doses are necessary, treatment should be followed by electrocardiograms and preferably in the hands of one well acquainted with the use of this drug.

AMINOPHYLLIN INTRAVENOUSLY

The intravenous use of Aminophyllin should be mentioned by itself in any practical discussion of cardiac medication. To be

sure, it is not as dependable in its action as some of the cardiac drugs mentioned above but at times, and under certain circumstances, it proves to be effective when more standard therapy has been unsatisfactory.

It is probably most dependable and effective in those cardiac cases where Cheyne-Stokes respiration is a major problem. Gradual physical exhaustion by loss of sleep and rest as a result of severe Cheyne-Stokes respiration has proved to be the undoing of more than one cardiac patient. This type of respiration can usually be controlled by the administration of 10 cc's ($3\frac{3}{4}$ grains) of Aminophyllin intravenously two to four times a day.

When the pain of coronary thrombosis proves particularly resistant to opiates, an intravenous injection of Aminophyllin will occasionally result in complete relief. Similarly in intractable cases of cardiac asthma, when the usual treatment is not completely successful, an intravenous dose of this drug may be of considerable value.

In general, Aminophyllin given intravenously has relatively few dangers if employed

judiciously and, although undependable, it is always worth a trial, particularly under such circumstances as have been mentioned above.

CONCLUSION

The purpose of this discussion has been to summarize from a practical standpoint the clinical aspects of our knowledge of those drugs which are needed to handle the majority of cardiac problems encountered in general practice. The intricacies of treatment of the more unusual cardiovascular problems have been purposely omitted since it was felt that a discussion of these would be more confusing than valuable to the general practitioner. It should be thoroughly appreciated, however, that the treatment of individuals with heart disease is not necessarily largely a matter of drug therapy. Rational advice on diet and weight, the rearrangement of the patient's routine of life, adequate rest and also, reasonable physical exercise are not infrequently as important, and sometimes even more so, than any cardiac drug.

Treatment of older patients suffering from tuberculosis is one of our major problems in the eradication of the disease. A third of the patients in sanatoria are over forty years of age. Temporary forms of collapse treatment in older patients are less apt to be successful than the permanent form provided by thoracoplasty. One hundred sixty-two patients between the ages of 40 and 65 treated by thoracoplasty showed improvement of 84%, with 35% returning to work.—RICHARD H. OVERHOLD, M. D., *Amer. Rev. of Tuber.*, Feb., 1940.

In no place is tuberculosis at so low a level that we may safely, and in the interest of economy, relax the intensity of the tuberculosis control program. On the contrary, because the opportunity for real control of the tuberculosis situation seems more encouraging than ever, this is the time to intensify efforts rather than relax them. — HARRY MUSTARD, M. D.

The individual physician must protect the families in his care, and through them the community, by urging physical examination of domestic employees. Repeated emphasis on the necessity of this should result in the earlier diagnosis of tuberculosis and in the prevention of exposure to infants and children from this source of infection. An annual health certificate declaring freedom from syphilis, gonorrhea and tuberculosis should be the requisite for the position of nursemaid.—DAVID V. SHAR, M. D., *Journal-Lancet*, June, 1940.

While the school teacher has not more tuberculosis than the average adult, next to the family she provides the greatest opportunity for close prolonged contact with the school child. To require the teacher to provide a health certificate, including chest films, would serve to remove this reservoir of infection.—D. O. N. LINDBERG, M. D., *Ill. Med. Jour.*, Oct., 1935.

The President's Page

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION :

The year 1941 will demand added services from the medical profession. It is apparent already that many of our younger members will be engaged in the Medical Departments of our Army and Navy.* Once again the doctors of medicine will serve their Country as they have in the past with pride and honor. The practicing physicians holding the home-fronts will find their daily rounds growing longer and harder. The Association must try to do everything within its power to help.

Our standing and special Committees will find opportunities for study and will welcome helpful suggestions. This month I would like to emphasize the problems confronting our Special Committee on Maternal and Child Welfare: Dr. Roland B. Moore, Chairman; Drs. A. W. Fellows, Bangor; C. S. Bauman, Waterville; G. W. Twaddle, Lewiston; Alice A. S. Whittier, Portland; and Virginia C. Hamilton, Bath.

In October, at Bangor, Dr. Creadick called attention to the work being done in Connecticut to lower the mortality rates of mothers and infants. In November there appeared in the daily Press a report from Washington about the meeting of the Council for Mothers and Babies. In the report, figures were published to show that Maine had made improvement since 1936. The Maternal Mortality per 10,000 of live births in the U. S. in 1938 was 43.5. In Maine it was 46, in Colorado only 32. In Maine in 1938 the number of infant deaths for 1,000 live births was 56, in 1937 it was 65, in 1936 it was 64. For the United States in 1938 it was 51. Maine has shown improvement and the work of our Committee has played its part in bringing about the improvement. In actual numbers there were 70 mothers who died in Maine in 1938 from puerperal causes. These were divided, 33 in cities, and 37 in rural communities.

And in Maine in 1938, 856 babies who were born alive died before they reached the one year mark. Of these, 273 were in urban areas and 583 in rural communities. Opportunities exist for making further improvement in the rate for Maine. Your Committee will study the conditions and will make recommendations. I bespeak your interest in their work, your helpful suggestions to the committee and your coöperation in plans which will be formulated.

* Refer to letter on Page 18.

THOMAS A. FOSTER, M. D.,
President, Maine Medical Association.

Editorials

The Annual Congress of Industrial Health

Industrial health, industrial production and national preparedness have a hook-up that is not only of exceptional interest but of the utmost importance to the success of the task that must be accomplished. Industrial absenteeism due to preventable illness and injury, the proper care of the results of trauma, all of which have an enormous total aggregate with a corresponding increase in the delay of vital production and financial loss, become and are definite medical problems. The Congress meets in Chicago, at the Palmer House, January 13 and 14, 1941, and offers a program of the greatest value. Recognizing the fact that in the field of trauma, injuries of the eye and hand predominate over many others, symposiums will be presented showing from experience the methods of managing and minimizing these costly types of industrial disability. Industry has long recognized the troublesome features of occupational dermatitis and the congress has planned to include discussion of the criteria for the diagnosis, treatment and prevention of the various cutaneous disorders. As the *Journal of the American Medical Association* points out, editorial November 23rd, replacement of susceptible workers may be the only solution in such cases.

Appropriately commenting on the fact that every man hour of production is vital in the preparation for prompt and adequate national defense, and it must be easily recognized that the total aggregate is enormous in time lost and is accompanied by a corresponding expense, the fact stares the country in the face that we have, as a people, made an irrevocable decision as to those we will help and are helping. Dislike as we may methods employed by some of the totalitarian powers to obtain a high degree of industrial efficiency and production, and it is admitted that some of them have no time and place in a country like the United States, it is beyond dispute that efficiency is not a mere word of mouth with Ger-

many. As a nation Germany is efficient and brutally so but to assume that what has happened to others may not happen to us is certainly optimism based on nothing more or less than wishful thinking.

Adequate national defense and preparedness is a vast undertaking. It will demand sacrifice from all to the best end of the common good and safety. Life with us as a nation must go on; the manufacture and the distribution of necessities must continue and as far as possible without disruption of any segment of business but again we must remember in order to do the job as it should be done careful planning of our needs and execution of those plans is the task of a united people. Exploitation and cupidity on the part of employers or employees is absolutely indefensible and surely the government of the United States is not helpless to prevent unwarranted strikes or any other practices that rob the nation of the admitted highly valuable man hours. Men who are inducted into the military services are entitled to know that sacrifice on their part will not be nullified by unfair and unjust practices by any one who feels the time opportune to gain ends of a selfish nature. A court in New York recently saw fit to punish by imprisonment some misguided and unwise theological students who declined to obey the law of the land. By the same token, punishment sure and swift should be the lot of those who in these times of national danger perform or advocate any acts endangering the safety of the country.

Teaching Clinics in Surgery

The Committee on Graduation Education have made arrangements for the following teaching clinics in Surgery:

1. Diabetic Rounds starting every Monday, at 8.00, at the New England Deaconess Hospital, on the second floor with the medical and surgical phases of this important disease emphasized by Dr. Joslin, Dr. McKittrick and associates.

2. Head Injuries: Donald Munro, M. D., Chief of Neurosurgery, Boston City Hospital—Tuesday, A. M.
3. General Surgery (operative clinics): Howard M. Clute, M. D., Massachusetts Memorial Hospital, Boston—Wednesday, A. M.
4. At the Massachusetts General Hospital every Thursday morning at 8.00 is a Peripheral Vascular clinic; following at 9.00 a surgical clinic; a medical clinic at 11.00, and a clinico-pathological conference at 12.00.
5. Traumatic Surgery: Gordon M. Morrison, M. D., Boston City Hospital—Friday, A. M.

It is realized that it is difficult to provide adequate Continuation of Education in order to afford physicians opportunities of keeping abreast of latest developments. The above mentioned clinics have a large amount of teaching material and offer exceptional opportunities. To these clinics members of the Maine Medical Association are most cordially invited and since the chiefs of the services are men we know most happily as friends and colleagues the opportunities thus available become even more valuable. Formal applications are not necessary, the clinics are in session each day that is designated throughout the year, but it is suggested that a letter or telegram be sent to the clinician in charge that he may be on the outlook for those attending. One of the most valuable ways to obtain information on any subject is to go to a friend who is in a position to help. The members of the Maine Medical Association can be congratulated that such delightful opportunities are theirs for the mere asking. The JOURNAL extends its thanks to the Committee on Graduate Education and the good friends who have so kindly expressed it their privilege to coöperate with the efforts of the committee. Letters or messages can be sent to Dr. Joslin or Dr. McKittrick at the New England Deaconess Hospital; Dr. Munro at the Boston City Hospital; Dr. Clute at 171 Bay State Road; the Massachusetts General Hospital; and Dr. Morrison at 520 Commonwealth Avenue.

Correspondence

December 23, 1940.

DR. FRANK JACKSON,
Editor of the JOURNAL OF THE MAINE
MEDICAL ASSOCIATION,

Dear Doctor Jackson:

In reply to your request that a report of the activities of the State Cancer Committee be submitted for publication in the JOURNAL

I will make the following comments:

- I. The Committee is not prepared as yet to present a plan which is sufficiently formulated to serve as a definitive program.
- II. Such a program requires much study with particular reference to the needs of this state, and a study of plans which are in operation in other states with a view as to their usefulness in meeting our own needs with reference to facilities already available.
- III. In general the programs in use are implemented either in the form of a commission or in the form of an administrative division of the Health Department.
- IV. Any plan must have the support and coöperation of the Medical Profession. I believe the work of the State Cancer Committee would be facilitated by the addition of a cancer committee in each county society. This committee could serve, among other things, as a local information bureau, keep in touch with educational and other activities, and provide for a speaker's bureau.
- V. Any plan must correlate the activities of lay organizations as represented by the Women's Field Army, those of the State Health Department, and those of the State Medical Association.

Very truly yours,

(Signed) MORTIMER WARREN, M. D.,
Chairman of the State Cancer Committee.

From the Secretary's Office

TO THE MEMBERS OF THE MAINE MEDICAL ASSOCIATION:

Because of its importance to many of our members we are publishing the following letter which was sent to the Secretary of each County Medical Society in our State on December 23, 1940:

December 23, 1940.

Dear Doctor:

C. A. Dykstra, National Director of the Selective Service, has made the following decision:

“Professional men, including lawyers, doctors, dentists, and veterinarians, must be considered eligible for selective service training even though that places them under considerable personal handicap”.

This means that all Class 1A men if drafted will be treated equally as any other draftee and it is apparent that this would create a great inequality so far as medical men would be concerned as they could expect nothing better than privates in the ranks.

On December 20th, Col. John G. Towne, Medical Advisor of the Selective Draft, received the following letter from the Corps Area Surgeon, First Corps:

“Attached is a copy of radio received from Surgeon General's Office, Washington, D. C. Can you notify local boards that we would welcome young doctors, dentists and veterinarians into the Reserve Corps who are under 35 and who can qualify if being placed in Class 1A”.

It cannot be too strongly emphasized that all medical men in this State who come under this class should immediately apply to the Surgeon General, United States Army, for a commission in the Reserve Corps in order that this tremendous inequality of service could be eliminated. I urge that you immediately contact all members in your Society who come under this group.

Sincerely yours,

(Signed) FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

County News and Notes

100% Paid-Up Membership for 1941

Piscataquis County Medical Society, N. H. Nickerson, M. D., Greenville, Secretary.

For the fourth consecutive year credit goes to the members of the Piscataquis County Medical Society for being first with 100% payment of dues.

Cumberland

George O. Cummings, M. D., of Portland was elected President of the Cumberland County Medical Society at the annual meeting held Friday evening, December 20, 1940, in the Lafayette Hotel.

Other officers elected were:

Vice-President: Samuel G. Sawyer, M. D., Cornish.

Delegates to the annual meeting of the Maine Medical Association: F. A. Ferguson, M. D., Ernest A. Greco, M. D., of Portland; and F. A. Smith, M. D., of Westbrook for one year; and E. R. Blaisdell, M. D., P. H. McCrum, M. D., R. S. Hawkes, M. D., of Portland, and C. E. Richardson, M. D., of Brunswick for two years.

Councilors: Henry M. Swift, M. D., George A. Tibbetts, M. D., and Luther A. Brown, M. D.

Committee on Public Relations: Roland B. Moore, M. D., Harold V. Bickmore, M. D., and Roderick L. Huntress, M. D.

Legislative Committee: C. B. Sylvester, M. D., and E. E. O'Donnell, M. D.

Henry H. Brock, M. D., was elected to Honorary Membership for having served 50 years in the medical profession.

James M. Parker, M. D., and Henry B. Finks, M. D., were elected to membership.

James Toumey, M. D., of the Lahey Clinic, Boston, addressed the meeting on *Various Conditions Causing Low Back Pain*.

A clinic at the Maine General Hospital preceded the evening meeting.

DONALD H. DANIELS, M. D.,
Secretary.

Portland Medical Club

The annual dinner meeting was held at the Columbia Hotel, on Tuesday evening, December 3rd, at 7.00 P. M. There were 79 members and 2 guests present.

Dr. Lewis K. Austin was made an honorary member. Dr. Reynold G. E. Ulpts was elected to membership.

The revised Constitution and By-Laws, presented at the November meeting, were adopted.

Officers for 1940-1941 were elected as follows:

President: M. Carroll Webber.

Vice-President: Edward A. Greco.

Secretary-Treasurer: Alice A. S. Whittier.

Board of Censors: Harold A. Pingree, Lucinda B. Hatch, Oramel C. Haney.

Committee on Outside Relations: Thomas A. Foster, Thomas Tetreau, Philip P. Thompson.

Committee on Liaison: Thomas J. Burrage, Roland B. Moore, Theodore C. Bramhall.

The Oration was delivered by Dr. Adam P. Leighton. He chose for his subject *Medical Reminiscences of Three Decades*. Dr. Leighton described the medical life of Portland as he remembered it from early childhood, and spoke of the good work done in the days of the Bowdoin Medical School. He related in a most entertaining manner some of his unusual experiences in the practice of medicine. He later referred to the problems confronting and challenging the Profession today, stressing especially the position of the cults.

In closing, a rising vote of thanks was given to Dr. F. A. Ferguson, the retiring President.

Respectfully submitted,

ALICE A. S. WHITTIER,
Secretary.

Franklin

The annual meeting of the Franklin County Society was held at Farmington, Maine, on December 2, 1940.

The following officers were elected for the year 1941:

President: Frank Springer, M. D., Farmington.

Vice-President: James Reed, M. D., Farmington.

Secretary-Treasurer: Lorrimer M. Schmidt, M. D., Strong.

Delegate to the annual meeting of the Maine Medical Association for 1941: George L. Pratt, M. D., Farmington.

Alternate: Cecil F. Thompson, M. D., Phillips.

Board of Censors: James Reed, M. D., Maynard Colley, M. D., and C. C. Weymouth, M. D.

LORRIMER M. SCHMIDT, M. D.,
Secretary.

Your Membership expired December 31, 1940

Kennebec

The annual meeting of the Kennebec County Medical Association was held at the Augusta State Hospital, Thursday, December 19, 1940.

Clinical Session at 5.00 P. M. which was a presentation of cases by members of the Staff.

Dinner at 6.30 P. M., followed by a business meeting.

Minutes of the last meeting were read and approved.

The reports of the Secretary and Treasurer for 1940 were read and accepted.

The applications of William Wallace Hardman, M. D., of Togus; Helen Curtis Provost, M. D., of Augusta; and Luverne Harris, M. D., of Richmond; were received and referred to the Councilors.

The following members were appointed by the Chair to nominate the officers for the ensuing year: G. W. Alexander, M. D., Gardiner; Moses Lubell, M. D., Waterville; and Samuel H. Kagen, M. D., Augusta.

They reported as follows:

President: Ivan E. McLaughlin, M. D., Gardiner.

Vice-President: L. A. Guite, M. D., Waterville.

Secretary-Treasurer: Frederick R. Carter, M. D., Augusta.

Councilor for three years: Thomas McCoy, M. D., Waterville.

Delegate to the Maine Medical Association: Blynn O. Goodrich, M. D., Waterville.

Alternate: George R. Campbell, M. D., Augusta.

It was moved and seconded that the by-laws be suspended and the Secretary cast one vote for the officers for the ensuing year which was done.

Thomas A. Foster, M. D., President of the Maine Medical Association, was present and gave an outline of the early history of the County Association, mentioning many of the distinguished physicians who have been members of our Association. He spoke also relative to the affairs of the Maine Medical Association.

P. L. B. Ebbett, M. D., President-Elect of the Maine Medical Association, and Carl Stevens, M. D., Councilor for the Sixth District and Chairman of the Council of the Maine Medical Association, spoke briefly.

The address of the evening was given by A. Warren Stearns, M. D., Dean Tuft's Medical School, whose subject was *Hypochondria and Hysteria, An Historical Study of the Evolution of Functional Nervous Disease*. His talk was very interesting and was amplified by lantern slides. It was followed by a very enthusiastic general discussion.

There were 43 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,

Secretary.

Knox

A meeting of the Knox County Medical Society was held at Rockland, Maine, on November 12, 1940. Howard L. Apollonio, M. D., President, presided.

The speaker of the evening, Dr. Dwight O'Hara, was introduced and gave a talk on *Pneumonias in Massachusetts from 1900 to 1940*. He also showed that the incidence of other infectious diseases paralleled those of pneumonias. Treatment as used today was outlined.

It was voted to have the annual meeting on December 17th.

The annual meeting of the Knox County Medical Society was held at the Copper Kettle, Rockland, Maine, on December 17, 1940. Charles B. Popplestone, Vice-President, presided.

An application for membership by Paul Jones, M. D., Union, was read and referred to censors. The secretary's financial report was read and approved. Officers were elected as follows:

President: Charles B. Popplestone, M. D., Rockland.

Vice-President: Frederick Dennison, M. D., Thomaston.

Secretary-Treasurer: A. J. Fuller, M. D., Pemaquid.

Delegates to the annual meeting of the Maine Medical Association: James Carswell, M. D., Camden; Gilmore Soule, M. D., Rockland.

Alternates: C. Harold Jameson, M. D., Camden; Charles B. Popplestone, M. D., Rockland.

Board of Censors: A. W. Foss M. D. (1 year); C. H. Jameson, M. D. (2 years); H. W. Frohock, M. D. (3 years).

A. J. FULLER, M. D.,

Secretary.

Penobscot

The regular monthly meeting of the Penobscot County Medical Association was held at the Bangor House, Bangor, Maine, Tuesday, December 17, 1940.

Elected to membership were: Dexter Jameson Clough, 2d, M. D., Bangor; Hans Schurmann, M. D., Dexter; John Eldrid Smith, M. D., Bangor.

The speaker of the evening was Charles H. Lawrence, M. D., of Boston, Massachusetts. His subject was *Adolescent Menstrual Disturbances, their Significance, Diagnosis and Treatment*.

There was an attendance of 40.

FORREST B. AMES, M. D.,

Secretary.

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Piscataquis

A meeting of the Piscataquis County Medical Association was called to order at 2.30 P. M., November 21, 1940, in Doctor A. M. Cardes residence in Milo, Maine.

The minutes of the last meeting were read and approved.

The application of George Carlson Howard, M. D., was read and referred to the Board of Censors.

Wilfred J. Comeau, M. D., of Bangor, gave a most instructive talk on Cardiac Disease.

The Chas. Deane Memorial Hospital in Greenville Junction extended an invitation to the Piscataquis County Medical Association to attend a cardiac clinic some time when convenient to Doctor Comeau. Arrangements were made to have this clinic on December 12th.

Eleven members and three guests were present.

N. H. NICKERSON, M. D.,
Secretary.

New Members

Cumberland

James M. Parker, M. D., Portland, Maine.

Henry B. Finks, M. D., Portland, Maine.

Penobscot

Dexter Jameson Clough, 2d, M. D., Bangor, Maine.

Hans Schurman, M. D., Dexter, Maine.

John Eldrid Smith, M. D., Bangor, Maine.

Coming Meetings

Penobscot

Penobscot County Medical Association, Forrest B. Ames, M. D., Bangor, Maine, Secretary.
Tuesday, January 21, 1941.

Necrology

William Langdon Haskell, M. D.

1870 - 1940

Doctor William Langdon Haskell, 70, widely known Lewiston physician and surgeon, died at his home Monday, December 9, 1940, following an illness of three weeks. The son of Woodbury and Arabella Hillman Haskell, he was born at Bowdoinham, February 3, 1870.

He was educated in the schools of Brunswick and was graduated from Bowdoin College Medical School in 1894. He later studied in New York. He first started medical practice at Sullivan where he remained eight years. He then spent a year at the Maine General Hospital, Portland, following which he went to Lewiston. For the past three years Doctor Haskell had been a Director of the Staff of the Ste. Marie's General Hospital, where he had been a surgeon since 1903.

Doctor Haskell was long prominent in the National Guard, first joining when he was 18 years of age. He was made a Major when the United States went to war. In March, 1918, he sailed for France, where he was assigned to a medical camp at Hausimont, near the front lines. Returning a year later he resumed his medical and surgical practice in Lewiston.

He was a member of the American Medical Association, Maine Medical Association, and the Androscoggin County Medical Association. He was one of the first to be named as medical examiner for the State and served several years in that capacity. He once served on the Lewiston school board and was medical examiner of the local draft board No. 2.

Doctor Haskell had conducted a clinic at the Lewiston Bleachery, his long service at this industrial plant being under four administrations. He also had medical charge of all local mills.

He was a member of the American Legion and Veterans of Foreign Wars, of the Kora Temple Shrine, and was a charter member of the Blue Lodge of Masons at Sullivan with which he always retained his membership. He was a member of the Lewiston Lodge of Elks, and of the Episcopal Church of Brunswick.

In 1900, Doctor Haskell married Miss Emma F. Vose, who with one son, William L. Haskell, Jr., and a grandson, William L. Haskell, 3, survive him.

Special Notices

From the Committee on Graduate Education

Realizing that it is difficult to provide physicians opportunities of keeping abreast of the latest developments the Committee on Graduate Education announces that arrangements have been made for the following teaching clinics in Surgery.

1. Diabetic Rounds starting every Monday, at 8.00, at the New England Deaconess Hospital, on the second floor with the medical and surgical phases of this important disease emphasized by Dr. Joslin, Dr. McKittrick and associates.

2. Head Injuries—Donald Munro, M. D., Chief of Neurosurgery: Boston City Hospital every Tuesday morning.

3. General Surgery (operative clinics)—Howard M. Clute, M. D., Massachusetts Memorial Hospital every Wednesday morning.

4. At the Massachusetts General Hospital every Thursday morning at 8.00, is a Peripheral Vascular clinic; following at 9.00, a surgical clinic; a medical clinic at 11.00 and a clinico-pathological conference at 12.00.

5. Traumatic Surgery—Gordon M. Morrison, M. D., Boston City Hospital every Friday morning.

All the clinics mentioned are held daily with the exception of holidays.

Members of the Maine Medical Association who are interested in these subjects will be welcome at these clinics on the designated days throughout the year and while no formal applications are necessary it is suggested that telegrams or letters be sent to the men in charge in order that the exact hour be known and that they may be on the lookout for those attending. Telegrams or letters can be sent to Dr. Joslin or Dr. McKittrick at the New England Deaconess Hospital, (No. 1); Dr. Munro at the Boston City Hospital, (No. 2); Dr. Clute at 171 Bay State Road, (No. 3); the Massachusetts General Hospital, (No. 4); and Dr. Morrison at 520 Commonwealth Avenue, (No. 5).

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.

2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.

3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.

4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.

5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.

6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.

7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

The Commonwealth Fund

The Commonwealth Fund has made available twenty-eight post graduate Fellowships for the coming year, to be divided among practicing physicians of Maine, New Hampshire and Vermont. Preference will be given to men who have been out of medical school at least five years, who are not more than forty-five years of age and who are engaged in general practice. The fund makes available a stipend of \$250 for each of the months the individual is on Fellowship plus tuition and travel. Applications may be obtained directly from the Commonwealth Fund, 41 East 57th St., New York City, or from the office of the State Secretary. The Director, Dr. Scamman, will be in Maine late in March to interview applicants for these Fellowships so it is suggested that physicians interested make applications as soon as possible.

Tumor Clinics

Bangor: *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*

Lewiston: *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. V. Call, M. D.*

St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland: *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*

Waterville: *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*

Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Book Reviews

"Gynecological and Obstetrical Pathology with Clinical and Endocrine Relation"

By: Emil Novak, A. B., M. D., D. Sc. (Hon. Dublin), F. A. C. S.; Associate in Gynecology, The John Hopkins Medical School; Gynecologist, Bon Secours and St. Agnes Hospital, Baltimore.

With 427 Illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$7.50.

This book, written "out of the fullness of my heart" as the author calls it, is a record of his own work and the result of his experiences, accumulated during the past twenty-five years of practice of gynecology, as well as teaching undergraduate and graduate students. The author's method of teaching gynecologic pathology always follows along lines of interrelationship with clinical gynecology and to some extent with obstetrics. The combined interrelationship with the endocrine system is always kept in mind. Each chapter is supplemented with bibliographical references from recent publications.

"Applied Pharmacology"

By: Hugh Alister McGuigan, Ph. D., M. D., F. A. C. P.; Professor of Pharmacology and Therapeutics, University of Illinois, College Medicine.

Illustrated.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$9.00.

Like most branches of the art and science of medicine and medical practice applied pharmacology, to be medically successful, must be based on knowledge of anatomy, both macroscopic and microscopic, physiology, chemistry, and others. The author of this textbook successfully demonstrates this. He has produced a work of superlative value for the medical student and practitioner alike. The reader finds here collected the practically useful knowledge available at the present time so far as the action of drugs and druglike substances on and in the human organism is concerned, not excluding those substances which are produced within the body while functioning in various states of health or disease. This comprehensive treatise promises to fulfill a long-felt need in medical literature.

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- ★ Bartholinitis and Skeneitis
(due to *Trichomonas Vaginalis*)

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"Getting Ready to Be a Mother"

By: Carolyn Conant Van Blarcom, R. N.
Revised by Hazel Corbin, R. N.; General Director
Maternity Center Association.

Fourth Edition.

Published by The Macmillan Company, New York,
1940. Price, \$2.50.

Since 1922 this little book has enjoyed the favor of the Maternity Center as well as the multitude of prospective and successful mothers who have received their encouragement and practicable instructions from that source. The booklet is built up on the fact that "Your baby lives nine months before it is born." By means of many illustrative pictures and sketches the text teaches the essentials of pre-natal and post-natal care in easily understandable ways. Small enough to be read during a few leisure hours, the information contained therein covers a time-space large enough to bring comfort and peace of mind to the reader over a period of many months, even years.

"Office Urology—With a Section on Cystoscopy"

By: P. S. Pelouze, M. D.; Assistant Professor of Urology, University of Pennsylvania; Consulting Urologist, Delaware County Hospital; Special Consultant to United States Public Health Service.

443 Illustrations, 19 in color.

Published by W. B. Saunders Company, Philadelphia and London, 1940. Price, \$10.00.

Office Urology has been written by an expert who has accumulated many and varied experiences in urology as practiced in his office. It is written for the practitioners desiring the best form of advice that can be had for their own use and their patients' benefit. The author is honest, outspoken in his common sense advice. He knows from long experience that many surgical operations which finally become necessary could have been avoided if more careful attention had been paid to apparently little things years before. He is neither filled with over-confident youthful enthusiasm nor weighted down with supermature pessimism, but presents plainly plain facts. "In the advance of modern urology there has developed a decidedly general tendency to search for weighty, super-scientific explanations for perfectly simple little things. . . . There is much reason for us to grow a bit more critical of our use of that term 'neurotic,' particularly as it is applied to patients with urogenital sensory and, more particularly, sexual symptoms. . . . One need not be deeply versed in the finer points of psychology in order to reveal the mental fixation that underlie these cases presenting urogenital sensory symptoms. Searching for the fears that lie so near the surface as do these needs no great psychiatric training. It needs

just plain common sense. . . . We, as physicians to these patients, might do well to develop one fixation ourselves, viz.: Psychogenic sensory symptoms are not imaginary things, they are just as real as is the discomfort of a surface paraesthesia or the pain of a true neuritis. . . . It must be realized that today 'literature' and human contacts fairly reek with a type of sexual pseudoscience that could do nothing else but cause all sorts of demoralizing mental fixations. And unless one has discovered and removed these fixations he has done little for his patient."

These are only a few words taken at random from the 720 pages of this excellent book. It is literally filled with common sense advice which is applicable every day in the practice of office urology. There are excellent descriptions of instrumentation, cystoscopy and office surgery of urologic complications. The book is a very welcome addition to the literature of medical specialties.

"The Practice of Medicine"

By: Jonathan Campbell Meakins, M. D., LL. D.; Professor of Medicine and Director of the Department of Medicine, McGill University; Physician-in-Chief, Royal Victoria Hospital, Montreal; Formerly Professor of Therapeutics and Clinical Medicine, University of Edinburgh.

Third Edition.

562 Illustrations, 48 in color.

Published by The C. V. Mosby Company, St. Louis, Mo., 1940. Price, \$10.00

In the normal human intercourse all sciences are harnessed to that star, knowledge, that, so we hope, will always lead us on and up to a happier life. Frequent revision of our work is often necessary because newly acquired knowledge demands this. The third revision of Meakins' Practice of Medicine incorporates all that is good and of lasting quality. Medical teachers, students, and practicing physicians helped to improve this work by way of their constructive criticism and are given full credit for their coöperation. The book is representative of the "family doctor" and his understanding of and sympathy with human beings, men, women, children, well or ill. Their faith in their doctor fills him with enthusiasm to practice medicine among them wholeheartedly; it fills them with a desire to go to him, confide in him their innermost feelings and emotions, make of him their confessor, judge, counselor and friend in all walks of life. True to the nature of the family physician and teacher to medical students, Dr. Meakins cautions his readers that even though we have been, are, and shall be confronted with many disappointments, especially in therapeutics, we must never become so pessimistic as to express absolute hopelessness in therapeutics. This is a confession of knowledge of strength and weakness of things human and of faith in progressive creative enthusiasm.

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“Methods for Diagnostic Bacteriology”

By: Isabelle G. Schaub, A. B.; Assistant in Bacteriology, Department of Pathology and Bacteriology, The Johns Hopkins University School of Medicine; and M. Kathleen Foley, A. B.; Bacteriologist in Charge of the Diagnostic Bacteriologist Laboratory of the Medical Clinic, The Johns Hopkins Hospital, Baltimore.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$3.00.

In the laboratories of the Johns Hopkins University School of Medicine and Johns Hopkins Hospital are trained large numbers of medical students, interns, and technicians. The technique taught and learned is in principle that contained in this book.

In it one may find explicit directions for the proper handling, preparation and examining of clinical and autopsy material, preparation of smears, choice of media, methods of making plate and broth cultures, temperatures and conditions of incubation, animal inoculations, identification of the usually encountered organisms, methods of serological study of these organisms and of the patient's sera. The information contained in this book is not usually readily found in the ordinary bacteriology textbooks. Theoretical discussions and explanations are omitted. The even-numbered pages are clean as a slate for the worker's convenience in entering his own additional discoveries.

“Synopsis of Materia Medica, Toxicology, and Pharmacology—For Students and Practitioners of Medicine”

By: Forrest Ramon Davison, B. A., M. Sc., Ph. D., M. B.; Assistant Professor of Pharmacology in the School of Medicine, University of Arkansas, Little Rock.

45 Illustrations.

Published by The C. V. Mosby Company, St. Louis, Mo., 1940. Price, \$5.00.

In writing this synopsis the author kept in mind that pharmacology is an integral part of medicine and that there should be a judicious limitation of the subject matter consistent with its importance in the field of medicine.

All synoptic books are especially prepared for students for purposes of quick reference. The author of this most recent addition to the Mosby Synopsis Series fully understands these requirements. In order to reduce the possibilities of confusion and unnecessary weightiness he included only those drugs and preparations listed in the U. S. P., N. F. and N. N. R. in this volume which are of known well established therapeutic value. Highly specialized scientific details, though interesting and beautiful to look at but of little real value to the practicing physician of the future, have been omitted. Complete bibliographic references for further study are appended to every chapter.

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The Journal of the Maine Medical Association

Volume Thirty-two

Portland, Maine, February, 1941

No. 2

*Problems in Surgery of the Intestine**

By EUGENE E. O'DONNELL, M. D., Portland, Maine

This paper is based on a review of recent literature plus ten years' observation of surgical problems in the ward, operating room, and at the post-mortem table. Derangements of function of the intestinal tract are common and are observed by practitioners and investigators in almost every branch of medicine. They are frequently the manifestation of disease of some other part of the body, and as such may come to be regarded casually by those of us who are not primarily interested in disorders of the gastro-intestinal tract. For example, gastro-intestinal disorders may be manifestations of such widely divergent conditions as brain tumor or pulmonary tuberculosis. They are observed by the general practitioner, the internist, and perhaps they are seen most often in their undifferentiated state by the gastroenterologist. Some of these conditions may be studied at leisure while others call for prompt action. Into this latter group might fall those cases of disturbed intestinal physiology which have to do with the interference with intestinal continuity. They are usually grouped together under the loose term of intestinal obstruction, and it is this particular phase of gastrointestinal surgery which we shall discuss.

The problem of the correct evaluation of gastrointestinal symptoms is extremely important to practitioners in every field. I recall one case of chronic, partial, small bowel obstruction which was treated as a nervous disorder by a psychiatrist for a period of several years, and another case of carcinoma of the rectum with diarrhea which was also treated by a psychiatrist until the carcinoma perforated into the peritoneal cavity and caused general peritonitis. The reflex distention which so often manifests itself as a complication of extra-peritoneal operations or trauma is of interest to the orthopedist and the urologist. The use and interpretation of the roentgen ray in both acute and chronic lesions of the gastrointestinal tract brings this problem definitely within the sphere of the roentgenologist. The pathologist, in his interpretation of the morbid anatomy, can much more accurately evaluate his findings if he has some knowledge of the problem which the therapist has faced and the manner in which he has attempted to manage the problem. A sound knowledge of both the normal and the pathological physiology of the intestinal tract is indispensable to those who do any type of abdominal surgery and emphasizes the fallacy

* Presented at the Portland Medical Club Meeting held October 1, 1940, at the Columbia Hotel, Portland, Maine, and at the Portsmouth, New Hampshire, Medical Society, December 3, 1940.

of attempting to separate abdominal surgery into several fields.

Roundtree has shown that under normal conditions approximately 7000c. c. of fluid reach the bowel each day through the activity of the glands which pour their secretions into the upper elementary tract. The sources and amounts of these are as follows:

Saliva	1500 c. c.
Gastric juice	2000 to 3000 c. c.
Bile	300 to 500 c. c.
Pancreatic juice	500 to 800 c. c.
Intestinal secretions	3000 c. c.

Under some conditions these fluids appear to be increased in amount. Some of the etiological agents which may produce obstructive lesions of the intestinal tract are: adhesions, intussusception, hernias, volvuli, foreign bodies, tumors, vascular disorders, and neurogenic disorders. Wangensteen has shown that in intestinal obstruction the following factors in addition to those mentioned above go to make up the intestinal contents: first, the formation of gasses as a result of digestive processes; second, diffusion of blood gasses into the intestinal lumen; third, and most important, the passage of swallowed air which represents about seventy per cent of the intestinal contents. While gasses are normally present in the intestinal tract, they are so mixed with intestinal contents that they are not discernable by X-ray in the small bowel except under unusual conditions. In the obstructed small intestine, however, the gaseous content of the bowel being increased, the X-ray is particularly valuable in demonstrating loops of dilated small intestine, and the presence of gas in the small intestine by X-ray is, except under unusual conditions, pathognomonic of intestinal obstruction. The fact that swallowed air represents such a high percentage of the intestinal content in the obstructed bowel readily explains why the nasal tube with constant suction is so effective in relieving abdominal distention. High-grade distention may, and frequently does, embarrass respiration and heart action through pressure on the diaphragm. This is far less important than the action of long, continued distention on the wall of the bowel. Here the amount of damage done is in direct ratio to the degree of pressure and the duration of the

disease. At the site of the obstructing lesion there is a segment of bowel which is atonic and above this there is a zone of hyperperistalsis. As time goes on, the zone of atonia tends to encroach on the zone of hyperperistalsis until finally the entire bowel above the obstruction becomes atonic and devitalized. Grossly, the bowel becomes shortened by contraction of the outer longitudinal muscular coat and relaxation of the inner circular layer of muscle. Due to the increased intra-enteric pressure, the mucosa becomes flattened, absorption is diminished, and finally if the intra-enteric pressure becomes high enough, the circulation becomes impaired with resulting gangrene of the bowel wall, and then, and not until then, does trans-peritoneal absorption with resulting peritonitis occur. In high intestinal obstruction the loss of fluids and electrolytes is an important consideration, whereas in obstruction of the colon, the fact that the ileocecal valve makes this a practically closed-loop type of obstruction with resultant higher intra-enteric pressure, the danger of gangrene and perforation makes this latter type of obstruction potentially the more dangerous. In the strangulation type of obstruction, such as one sees in intussusception and strangulated hernae, there is a good deal of hemorrhage into the bowel and here the blood loss factor is also an important consideration. Lymphatic absorption, while present in the obstructed bowel, is according to most observers, of no particular importance and no abnormal lymphatic absorption has been noted.

The symptoms which manifest themselves are as follows: first, pain. The pain is likely to be general abdominal pain, cramplike in character and may be localized in the epigastrium. Vomiting is likely to be frequent and abundant in high intestinal obstruction and is usually absent in obstruction of the colon. Intestinal colic or peristalsis audible with a stethoscope may be distinguished from ordinary borborygmi by the fact that the peristalsis reaches its height at the same time that the pain is most severe. In small bowel obstruction the vomitus or gastric content is almost always fecal-like in character. Wangensteen lists abdominal distention as one of the cardinal symptoms. I am inclined to dis-

agree on this point because while abdominal distention is present in many cases, it is not constant, particularly if the obstructive lesion is high in the small bowel. Abdominal tenderness is not present except where there has been a diffusion of blood into the peritoneal cavity. The question of whether the bowels have or have not moved recently or what the results of an enema may have been is of almost no importance. The practice of taking X-ray films of the abdomen to determine the absence or presence of gas in the small intestine has already been mentioned. X-ray evidence must not come to be regarded as necessary to the prompt institution of the proper treatment. The number of cases of definite clinical obstruction in which the mixture of gas and fluid in the bowel is such that gas is not visualized on the X-ray film is not inconsiderable, and I have seen serious consequences result in cases where the surgeon was unwilling to trust the clinical findings in the presence of a negative X-ray film. Gas in the small intestine is characterized by its central location on the X-ray film. The long axis of the shadow is usually transverse. When the loops are considerably dilated, the two intestinal walls separating adjacent loops are seen as a thin narrow wall. The occurrence of the fairly thick wall separating the greatly distended loops suggests the presence of fluid or exudate between the loops. Gas in the lateral borders of the abdomen is ordinarily in the colon. The long axis is usually vertical and the intestinal walls are thicker than in the small intestine. The mucosal folds give the film a feathery appearance. The fact that obstruction of the large bowel is a more or less closed-loop proposition in most instances is not always to be relied upon. I have in mind one case of large bowel obstruction with enormous distention of the colon where the intra-enteric pressure became so great as to seriously damage the cecum and in which there was also gas in the small bowel and gas distal to the point of obstruction on the X-ray film.

Careful grading of the treatment and the selection of the proper type of procedure is indispensable to the successful conduct of these cases. These patients are very much more ill than they appear to be. Obviously any attempt at treatment must include the

administration of saline solution where there has been loss of fluid and electrolytes, blood transfusion in the strangulation type of obstruction where there has been blood loss, conservative decompression and operation. The chapter on conservative decompression is an interesting one. It represents the accumulative work of many observers over a long period of time, finally culminating in the constant suction siphonage of Wangensteen. Wangensteen has shown that constant siphonage is insufficient because the column of fluid is interrupted by the gasses present, but that in constant suction, the force applied at the stomach is transmitted through the intestinal tract to the terminal ileum. It has been my experience that a large nasal tube is much more effective than a small tube in relieving distention of the upper intestinal tract. More recently Miller, Abbott, and Johnson following the work of Einhorn have devised the Miller-Abbott tube with which most of you are familiar. The principle of the Miller-Abbott tube is based on the fact that there is a zone of hyperperistalsis above the point of obstruction which will carry the tube along to the atonic area of bowel which once collapsed becomes a part of the zone of hyperperistalsis until the point of obstruction is reached by the tip of the tube. Its disadvantages are: first, as it is made at the present time it does not drain as satisfactorily as a large nasal tube; second, it requires a highly specialized team of workers; third, valuable time is lost during its introduction below the pyloric sphincter. Its advantages are: first, it will decompress the intestine as well as an ordinary enterostomy once it has reached the point of obstruction; second, it will help to localize the obstructing lesion; third, after it has progressed to the lower ileum fluid may be given by mouth without loss of electrolytes; fourth, it frequently saves the patient an operation. It is contra-indicated in the strangulation type of obstruction. In summary of the case for conservative decompression in intestinal obstruction, I would say that conservative decompression is an adjunct to and not a substitute for operative interference. If used as a substitute for operation it may so mask symptoms that an otherwise relatively safe situation may be rendered

more hazardous. Constant suction siphonage should not be discontinued when the patient is taken to the operating room because of the rapidity in which the intestinal contents may accumulate in the stomach with the consequent danger of aspiration of this material either during or immediately following the operation.

Finally, the operative treatment of intestinal obstruction may be grouped as follows: first, enterostomy. Enterostomy is a procedure which has been carried out for several hundred years. It has fallen into disrepute in some cases because it has been poorly done or the cases have not been properly selected. Wangensteen is a firm believer in the use of enterostomy in a simple type of obstruction. Second, lysis of adhesions. Lysis of adhesions is a very dangerous procedure except in very early cases. It is particularly dangerous in the presence of multiple distended loops of bowel. Third, resection operations. Resection operations on an obstructed bowel carry at least a fifty per cent mortality and are to be avoided if possible. When done for high intestinal obstruction primary anastomosis, although an extremely hazardous procedure, is necessary. When the devitalized loop is low in the ileum some form of Mickulicz procedure is probably preferable for the average operator. Anastomosing operations can be carried out much better high in the jejunum

where the bowel wall is larger in diameter and thicker and its blood supply is better than in the lower ileum where the reverse is true.

The above suggestions may serve as a yardstick for the average man who must meet these problems in his general surgical practice. I would like to add a word of caution to those operators of broad experience who have perfected a high degree of technical skill and confidence in their surgical work. I would like to urge them to restrict the surgical measures which they carry out on the patient with intestinal obstruction to the absolute minimum, to reduce the problem to its simplest terms because there is no other group of cases in which each added step of the operative procedure adds so much to the operative risk. The patient with an obstructed bowel is not a good candidate for anastomosing operations or highly complicated surgical procedures. They must be avoided if possible. We would do well in these cases to take a page from the book of the urologists who have so well demonstrated the advantages of graded and multiple stage operative procedures. In conclusion I would like to say that while early diagnosis is imperative it is not always possible and the benefits of early diagnosis may be rendered negligible by an ill-advised or poorly performed operative procedure.

Tuberculosis mortality acts something like a social barometer, rising during wars, and rising highest in the countries most affected by the war. It is difficult to prophesy what the present war will mean in increased tuberculosis mortality in the belligerent countries, but we may be sure that it will be once more a true barometer of disturbed social conditions. Countries which are making the greatest efforts, which are keeping their industries keyed up to the highest pitch, working their men the longest hours and reducing standards of living to the lowest levels are bound to suffer severely.—FRANK C. BOUDREAU, M. D., *News Digest of the Milbank Memorial Fund*, June, 1940.

There is need for expanding the mass X-ray procedure to the general population. This will uncover 80% of tuberculosis cases in a minimal stage, resulting in savings and making the problem of rehabilitation easier to solve.—H. M. PAYNE, M. D., Phila., *Tuber. Conf.*, 1939.

Tuberculosis of the intestinal tract is so frequent an occurrence in chronic pulmonary tuberculosis that it has sometimes been considered a part of the same disease. In over a thousand autopsied cases of tuberculosis, 70% had intestinal tuberculosis. Symptoms are frequently misleading.—J. H. CULLEN, M. D., *Bull. of Sea View Hospital*, Jan., 1940.

*Tuberculosis Case Finding with Reference to General Hospitals**

By LESTER ADAMS, M. D., Western Maine Sanatorium, Greenwood Mountain, Maine

The number of deaths from tuberculosis has declined in Maine from 1000 in 1900 to 240 in 1939. A decline is observed in all the States, not only in the number of deaths but also the number of living cases. Also there is evidence of decrease in the number of those infected as shown by tuberculin skin tests so that we know that only 10 per cent of school children in Maine react. In cattle the disease has been reduced to a low point so that it is not the menace to humans it once was; medical schools have difficulty in finding cases of tuberculous glands of the neck to show to students. York County, Nebraska, out of an estimated 40 living cases of tuberculosis, has recognized and recorded 33, and announces the intention "To be the first county in the United States where through direct effort tuberculosis has been completely controlled."¹ There are predictions from other sources of complete eradication by the year 2000 or sooner.

In spite of the decrease, tuberculosis is still the leading cause of death next to accidents between the ages 15 and 40 when individuals are most important economically, and so causes the greatest money loss of any disease. In Maine the cost of sanatoriums alone is about half a million dollars a year.

In the control of the disease it has long been recognized that discovery of cases was of great importance because persons with unrecognized disease may unwittingly spread it, and because early cases respond to treatment far better, than late ones. Dr. Trudeau, emphasized the importance 40 years ago, and the Trudeau Sanatorium was established to take only early favorable cases, preferably persons of some education, with the intention that they would get well, and return to their homes as examples and missionaries at a time when the disease was still generally thought of as being hopeless. This was recognized as the way to accomplish the most for the money available. Now for 15 years the National Tuberculosis Association has conducted an

annual Early Diagnosis Campaign to call attention to the need of early diagnosis, and to the means at hand for this accomplishment.

In order to diagnose tuberculosis early two facts stand out:

First: If an individual is allowed to develop the disease to the point where he has symptoms, realizes that there is some impairment of his health before seeking advice, the disease may have progressed so far that recovery is impossible. The characteristic of insidious attack is one that makes the disease difficult to deal with. Over a period of months or years there may be nothing to alarm the individual, as is seen in the occasional case of the athlete who engages in strenuous athletics and is found to have disease that has progressed to the point of cavity formation. Thus, in order to discover early cases, apparently healthy individuals must be examined.

Second: In order to discover early cases among these apparently healthy individuals the examination must include X-ray examination of the lungs with or without preliminary tuberculin skin testing. Those of us who are old enough have witnessed the development of X-ray technique from the day when it was useful for the demonstration of a fractured bone, but the delicate structure of the lung defied it; up to the time when articles appeared in increasing frequency praising this method as giving evidence in lung tuberculosis confirmatory of other methods of examination; until today with successive improvements and experience the method is credited with showing tuberculosis when no other form of examination will do it.

Thus, the Chadwick Clinics of Massachusetts, which were a pattern for school surveys here and elsewhere, adopted the tuberculin test as a means of separating infected individuals from non-infected ones and required X-ray of only the former group. The pres-

* Read before the Maine Hospital Association, Lakewood, Maine, August 21, 1940.

ence of a positive tuberculin test in a child caused a search for a source of infection among the contacts, sometimes leading to a grandparent, or other relative, a servant in the house, school teacher, or other person. Tuberculin testing among children eliminated the great majority and so was less expensive than X-raying all. The importance of this work is accepted, but we now hear much about the low yield and the expense involved so that the present trend is toward older groups in which cases may be found at less expense.

In control of the disease the goal is the recognition and registration of every case, permitting instruction and treatment so as to prevent further spread.

Statements² go unchallenged that all the knowledge required is already at hand to bring complete control of this disease. Thus, it has been recommended that the entire population of the United States be given tuberculin tests, and that those who react, about 50 per cent, be X-rayed, all of which could be done for one-half the cost of caring a year for the sick discovered by present methods.

More recent and more practical recommendations are studies of special groups known to have higher than average incidence of disease, as such studies will yield 70 to 80 per cent of early cases in contrast to 10 to 15 per cent discovered by methods depended on in the past.³ Before considering these recommendations one may ask whether such efforts are to be recommended in this State in addition to the work already being carried on. Some idea of the answer is indicated by figures from the histories of 59 patients at the Western Maine Sanatorium, July, 1940. These are adults, first admissions, with uncomplicated pulmonary tuberculosis.

1. Were these individuals examined before they got sick?

Only 12 per cent were, and they were examined because of known family or other contact or in school surveys. The remaining 88 per cent first consulted physicians because of symptoms.

2. Were they discovered early?

Twelve per cent were Minimal (Stage I) cases and 88 per cent were advanced (Stages II and III).

3. Did they have family history of tuberculosis or had they had known contact with the disease?

Only half had family history. Only half gave a history of known contact.

Thus, while known contacts may be expected to give the highest yield of cases of any group, and should be examined most intensively and persistently of any group, the figures show that efforts must extend beyond those who have had known contact or have reason to believe that they are diseased.

4. In view of the knowledge that X-ray will reveal tuberculosis before other methods, did these patients have signs in the chest discoverable by physical examination at the time of admission?

Those who had rales or other signs were 75 per cent; those who did not were 25 per cent. Because of the interval between X-ray and admission, it may be granted that some who had signs on admission had not had them at the time of diagnosis.

5. We may ask whether X-ray examination had been available to those patients, or whether distance or cost prevented this examination.

These histories show that 91 per cent had X-rays before admission and only 9 per cent did not have. This 9 per cent were all Advanced Cases with so much other evidence of disease that X-ray was not needed.

Evidently then X-ray examination was available to nine-tenths of the sanatorium patients in the western part of Maine previous to admission. It supplied confirmatory evidence where the suspicion of tuberculosis had already been aroused by history, symptoms or physical signs.

6. The Duration of Symptoms.

(A) The duration of symptoms before consulting a physician varied from an hour or less to three years, the average being six months. More than half consulted a physician within six weeks, and three-quarters within thirteen months.

(B) The duration of symptoms before diagnosis varied from a few hours to 9 years, the average being 13 months. In one-half the diagnosis was made in 3 months, and in three-quarters in 12 months. It is to be borne

in mind that the above information came from the patients and has not been checked with the knowledge had by physicians.

(C) The duration of symptoms before admission to the sanatorium varied from 12 days to 10 years, the average being 19 months, one-half being admitted within one year. One of the advantages offered by Maine is the number of beds for tuberculosis, two for each annual death, so that a patient rarely waits more than a few weeks after making application before being admitted.

7. How many had ever been patients in general hospitals before the onset of the present illness?

Forty-two per cent had been at some time patients in general hospitals. One individual had been an orderly in a general hospital where he cared for known tuberculous patients, and also in a special hospital where he probably had contact. In neither of these institutions was he X-rayed or tuberculin tested at any time during his service.

If we consider a program which stops short of universal X-ray, what individuals should be selected for X-ray? Studies have been made in various localities to give an answer to this question, and there is some indication from the census of sanatorium patients presented.

Certain industries are listed as hazardous, such as granite cutting. In this state we have no Negro population as in the South, or Mexican or Puerto Rican as in some of the cities, but there is a considerable group of Finns in whom the death rate is higher from tuberculosis than in any other racial group in this country or in Europe. In New York City⁴ homeless men have shown as much as 16 per cent of tuberculosis, 5.3 per cent of which is active and needing treatment. Inmates of prisons, jails, show an increased incidence. Old people show a high incidence of tuberculosis compared with other age groups and it seems that this is often overlooked, but the grandparent with chronic cough may be a menace now as well as in the past. It is recognized that patients with diabetes should all have X-ray examination of the lungs because of the danger of tuberculosis. Because there is a critical time for women after childbirth, X-ray of patients on the obstetrical service is

carried out in some institutions. Certain groups as Labor Unions are asking X-ray of their members. New Jersey has just passed a law requiring school teachers to be examined. Entrants to the College of the City of New York will be required to have examinations.

Nursing in general hospitals and tuberculosis hospitals is hazardous and the incidence of tuberculosis in this group is definitely higher than in the general population.

A year ago at the meeting of the Maine Public Health Association in this room the speaker was Dr. Robert Kerr, State Clinician for the State of New Hampshire, which has a death rate lower than that of Maine. He emphasized that the control of the disease did not depend on any one agency or influence, but on all working together. It seems that this emphasis on the need of coöperation of all agencies may raise the question in your minds as to whether general hospitals are giving fullest coöperation toward the control of tuberculosis.

A report of a survey⁵ showed that 10 Per Cent of the deaths from tuberculosis in up-state New York occurred in general hospitals (in 1936 and 1937) which had no special provision for tuberculosis. Of this number 74 Per Cent was pulmonary tuberculosis, the most infectious form; 61 Per Cent of these pulmonary cases were not reported as such until after death. An X-ray study of 4,853 adult patients admitted to general hospitals showed:

Reinfection (adult type) tuberculosis,	2.6 Per Cent
Clinically significant tuberculosis,	1.1 " "
Not previously suspected tuberculosis,	0.6 " "

A second report, referring to patients in general hospitals, states⁶:

"This group is large, it is prepared for diagnostic attempts, and it is in an environment where routine methods can easily be applied. It should be even more eligible and available than school or college groups, the personnel of offices and industries, the members of government groups or the inmates of prisons or asylums.

"Although the approach is logical, the need definite, the methods relatively simple, and

the results important, few hospitals are using an adequate routine for case finding and most are only now arranging for protection and examination of their personnel. Such care is highly laudable and necessary, but it is a secondary, after-the-horse-is-stolen approach compared to the recognition, isolation, and study of patients having tuberculosis."

"There are many reasons why the lungs of every patient, should be examined as soon as possible after admission, by some simple, quick, accurate, inexpensive diagnostic measure. The lungs are the most frequent site of important and infectious tuberculosis.

"Although certain patients may be admitted and handled as known cases of tuberculosis, others will hide the existence of disease through fear of being refused admission or from false pride. Many more will enter unaware of a lesion which may produce no signs or symptoms. All cases of the disease should be known to the examining physician, but surveys have shown that at least two-thirds are not found by the ordinary diagnostic measures."

This author continues, "It is astounding that, although the source of infection in hospitals is known and the value of such a discovery understood, the general application of routine case-finding examination is still delayed. The discovery is recent, the situation not generally understood, hospital managements are humanly inert, the recognition of a case would require a new routine of care, but these are logical reasons, not excuses for delay."

The X-ray examination of recruits in Australia is to be extended to the permanent military forces. Every member of the forces will be re-radiographed on his return from abroad. The incidence of active pulmonary tuberculosis was 0.55% among the 9,000 men examined.—ERIC COOPE, M. D., *British Med. Jour.*, Aug. 24, 1940.

Poor health cuts into profits as much as anything else, and the employer should watch for the first symptoms of disease among his workers.—*Crusader*, May, 1940.

SUMMARY AND CONCLUSION

The downward trend of tuberculosis may be greatly hastened by the more intensive application of known methods for case-finding, notably, X-ray of individuals before symptoms of the disease. The coöperation of all groups and individuals is necessary. In view of this situation general hospitals should ask themselves whether they should not lead the way in recognizing all the tuberculosis that enters and leaves their institutions to the end that it may be reported, treated, and sources of infection found. This will help in the double responsibility including the protection of their personnel from the spread of the disease. Should not this youthful and vigorous organization, the Maine Hospital Association, give to this subject earnest consideration?

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Tuberculosis is a disease of long duration and may have many phases. It may be acute, but is more often chronic with periods of quiescence followed by exacerbations and so continue for many years. Patients discharged from the sanatorium should be considered as having completed only the first phase of treatment.—HENRY D. CHADWICK, M. D., and HELEN EVARTS, *Amer. Rev. of Tub.*, March, 1940.

Weariness without cause indicates disease.—HIPPOCRATES.

The Rorschach Test in Diagnosis of Psychoses and Psychoneuroses*

By ANDRE A. WEIL, M. D., Augusta State Hospital, Augusta, Maine

The Rorschach Test derives its name from its inventor, Hermann Rorschach¹, a Swiss psychiatrist; yet, it was nearly ten years after his death in 1922 before this method was generally known and accepted⁵. We now have in New York a special institute which is interested in this test⁸.

Again a new test? again a new method? you will ask. Do we not have enough psychological and psychopathological tests from which we may recognize one or even several psychic factors? However, that is the immense significance of the Rorschach Test—we are not only able by its help to recognize one or two mental spheres, but by it we may discover almost completely the “ground-plan” of the psychic construction of the personality which we wish to test. We are able especially by the help of the Rorschach Test to recognize the *fundamental* affective and cognitive

organization of the patient’s mental life⁵. Besides that, we are able to say something definite about the intelligence of the person under examination, about his richness of psychic experience, his present mood, his intuition, his talent, as well as many other factors. When we test the mentally abnormal personality, we may obtain by this method valuable insight about the construction of psychoses and neuroses. Recently this test has been applied with great success in recognizing the mental changes which accompany diseases which have a definite physical basis as, for instance, chronic arthritis, tumors of the brain, injuries to the head, etc.^{3, 4, 6}.

The application of the test is simple. The patient is shown ten white cards, exact reprints of the original Rorschach cards, on which five black and five multi-colored ink blots are reproduced. (See Table I.) The

* Presented at the Nervous and Mental Disease Conference at the 88th Annual Session of the Maine Medical Association, at Rangeley Lakes, Maine, June 25, 1940.



TABLE I

Rorschach cards: No. 1, No. 7 (black), No. 8 (multicolored) and No. 3 (black and red). The other six test cards are similar.

portion to the total number of responses. Those who have special features in common in the Rorschach Test also have features in common in the construction of their personalities.

You will probably find it very strange that we are able to see a certain construction of the personality through the help of such simple things as ink blots, and even more strange that we can recognize aberrations from normal behavior. That means that we can diagnose neurotic and psychotic features. This is due to the fact that the patient does not know what he is being treated for and cannot, therefore, influence the test by intellectual rational factors. Most patients think that the Rorschach Test is a test of the fantasy, but in reality it has practically nothing to do with an examination of his fantasy, but rather with perception and comprehension. The acts of perception and comprehension reach very deep down into the psychic levels and therefore, in the Rorschach Test we have a projection of primitive, subconscious contents of the mental life into the outer world. In other words we may say that the blot itself does not mean anything but the patient "makes" something out of the ink blot by projecting his own conceptions into it.

I do not wish to bother you here with many theoretical or technical considerations. I think it will be much clearer to you how

valuable the Rorschach Test is when I explain to you briefly one of the most important correlations. One of these correlations is the so-called type of experience. The "experience-type" corresponds to the distinction between introvert and extrovert tendencies in the personality make-up. By introvert tendencies are meant the tendencies in the personality which aim at an individualistic way of living. As Harrower says, "The man who fulfills himself through drawing on his inner resources."³ The introvert type is recognized in the Rorschach Test by the relation between movement and color answers which stand in his case about 2 to 1 or 3 to 1 in favor of the movement responses. The extrovert type is just the opposite. That means such a person who needs others for his own development—who finds himself in his contacts with others. The extrovert type projects himself more into the outer world; the introvert type, more into the inner world. The extrovert type is well adapted, more clever and more prolific. The introvert type is somewhat clumsy and not so well adapted and instead of reproductive abilities, shows more original abilities. In the Rorschach Test we recognize the extrovert type by the predominance of color answers. In this survey card² we see the chief differences between both types:

TABLE IV

	<i>Predominance of Colors</i> (More extrovert)	<i>Of Movements</i> (More introvert)
<i>Intelligence:</i>	More life into the outer world More stereotyped	More original More life in the inner world More differentiated
<i>Affectivity:</i>	More labile	More stabilized
<i>Ability of Adaption:</i>	More	Less
<i>Motility:</i>	Excited; labile	Sedate and stabilized
<i>Behavior:</i>	Clever	More clumsy

Both these types can show in the Rorschach Test over-lapping values; that means, for instance, Rorschach Test results in which we have as many as four or five movement answers and no color answers at all. That is

the case when we have a too great introversion as in the case of psychogenic depression, climacteric melancholia and sometimes paranoid cases. On the other hand, a well-marked endogenous melancholia will show neither

color nor movement answers. But, a well-marked mania will show a great many movements and nearly the same amount of color answers. Why that is so we do not know exactly; we know it only by experience. Now you will ask, are there any types which show too many color answers and no movement answers at all. Yes, such types do exist. Those are the over-lapping forms of extrovert types, those who live only in the outer world, totally stereotyped, who only reproduce and not produce. And we know from experience that such types are usually the subnormals, the morons, the imbeciles and usually the feeble-minded epileptics.

Rorschach calls those who show about one or two movement answers and about the same amount of color answers, ambi-equal type. The ambi-equal develops along both lines, using the extrovert and introvert types of experience to enrich the other.

The concept of the "experience type" indicates different types of psychoneuroses also. The neurosis of the introvert is neurasthesia and psychasthesia. The neurosis of the extrovert is hysteria. The neurosis of the ambi-equal is compulsion neurosis. These human beings are oscillating between two poles.

Of course we can apply the experience type to recognizing the psychosis as well as the psychoneurosis. Regarding the group of schizophrenics, for instance, the predominance of movement answers indicate introverted, paranoid cases. The predominance of color answers shows the motor excited catatonic types, and if all movement answers are absent, the hebephrenic type.

There are also distinct correlations between characteristics elicited by the Rorschach Test and bodily constitution, especially between movement-color relation and the bodily make-up. We know, for instance, from Enke's findings⁷ that the bulk of pyknics belong in the group with predominance of color answers, but the asthenic type can be very frequently found among the types with predominance of movement answers. Only 6% of the pyknic type show an introversion according to the Rorschach Test.

I have given you here only a small cross-section out of a Rorschach psychogram, stressing the importance of the color-movement relation. Of course, no one who uses

the Rorschach method will make a diagnosis from this correlation only, but he will use it in connection with the other results. Due to the shortage of time, I am unable to give you all the interpretations and symptoms of the Rorschach Test.

The psychologist will make use of the test, especially in diagnosing the fundamental structure of the personality. He may use it to obtain a better picture of professional abilities, of the intellectual level, of the emotional life and mechanisms controlling it. The psychopathologist may claim the same points of view for applying the method. He will be able especially to differentiate between fundamental basic tendencies and such tendencies which are due to powers coming from his environment. The psychoanalyst will get valuable hints about the emotional life of the patient and also about the complex situation and its repression mechanisms. The sub-conscious world of anxiety and fear, the unfulfilled desires and eternal hopes will become clearer through the use of the Rorschach method. Let me illustrate here how it may be learned by a simple trick whether or not a patient is a fit subject for psychotherapy. It refers to the kind of movement answers. We divide the movement answers according to different points of view; for instance, according to the stretching and bowing movements. Look for a moment at Card No. 3 (Table I). A usual response to this card is "there are two men pulling on something." In this case we have a stretching movement response. People give such an answer who have an urge to drive towards activity. Those are the people who like to fight and who like to rise even when they have fallen. They are well fitted for psychotherapy; but when we have a subject who sees in Card No. 3 "two people who greet each other," then we speak of a "bowing movement" response. Those are the passive and resigned natures. In other words, such persons are not favorable for psychotherapy.

In ending, I wish to stress that we are just at the beginning of evaluating the importance of the Rorschach Test. We can build it up to a much broader base than it is used now. Probably many discoveries of psychopathology will arise in the coming years from this valuable test. We are, for instance,

working at the present time on the problem of the schizophrenic personality and its change due to the insulin treatment. May I say here that we have the impression that although a patient seems clinically cured, nevertheless in most of the cases, certain schizophrenic features can be elicited in the Rorschach psychogram taken after treatment. However, to verify this preliminary observation, it is necessary to wait until we have a greater observation material than we have at the present time.

The value of the Rorschach Test may possibly be better understood if I should give you an example:

The case is taken from our records and is that of an 18-year-old white male admitted to the Augusta State Hospital. A very definite history of schizophrenia was obtained, and on admission patient presented a well marked schizophrenic psychosis which could be best pronounced as a paranoid-catatonic mixed type. There was no doubt in the clinical diagnosis of schizophrenia because of the slow, insidious onset of the psychosis, the defective affectivity, and the hallucinations and illusions which the patient expressed. He experienced command automatisms. He, for instance, wanted to write a letter home but instead of writing a letter, he had to make a special drawing at the command of some woman whose voice he heard. He also showed blockage in thought and in action.

When we did a Rorschach Test on this patient we discovered quite a few schizophrenic signs.

But we didn't need the Rorschach Test to elicit them. We knew them by the clinical picture which he presented. But there was another symptom in the Rorschach Test which seemed rather strange to us at first. He presented many symptoms which could be easily interpreted as epileptoid symptoms, especially a very low animal per cent and a tendency towards so-called primary color

answers. That is especially interesting because we know that epilepsy and schizophrenia are to a certain extent antagonistic toward each other. From the patient's history we learned that his sister died at our hospital suffering from epileptic psychosis. A maternal cousin also suffered from epilepsy since the age of 3 years. A maternal uncle, however, once suffered from a paranoid form of Dementia Praecox.

This patient was given the insulin-shock treatment and here he gave further evidence of the epileptic parts of his constitution. Even with small doses of insulin, he suffered vehement, regularly occurring, epileptic seizures. It took a careful medication of Luminal in order to perform the insulin treatment in a proper way.

This illustrates clearly the value of the Rorschach Test not only for the diagnosis, but for the treatment as well.

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6. Krauss, S. Persoenlichkeitsveraenderungen nach Chorea minor. *Schweizer Archiv fuer Psychiatrie und Neurologie*, Vol. 34: 94 (1934).
7. Enke. "Die Konstitutionstypen im Rorschach'schen Experiment." *Zeitschrift f. Neur. u. Psych.*, Vol. 108, pg. 645 (1927).
8. Rorschach Institute. The Rorschach Institute, 3820 Waldo Avenue, New York, N. Y.

The tuberculosis disease rate of medical and nursing personnel in modern tuberculosis sanatoria is generally lower than in hospitals not having a properly supervised tuberculosis department.—B. H. WARDROP, *Hosp. Management*, Dec., 1939.

The tuberculosis patient is not a character out of a book but a human being whose reactions to tuberculosis are essentially his general response to life and its difficulties.—EVERETT T. CONLOGUE, M. D., *Amer. Rev. of Tuber.*, Aug., 1940.

The President's Page

To the Members of the Maine Medical Association:

Every month the President of your Association is more and more impressed with the increasing amount of Committee work incumbent upon individual members of all active organized medical groups. If organized medicine in this State is called upon for opinion and counsel in matters of public health, it desires to respond with opinion and counsel that is based on actual experience and reliable information. In order to do this it must have careful reports from working committees. The yearly reports of the Committees of the State Association could be more comprehensive and valuable if each County Society had sub-committees for study of local conditions. Certain Committees have greater opportunity for sub-committee work than others. Among these is our Committee on Cancer.

On page seventeen in the January issue of the JOURNAL appears a letter written by Doctor Warren, Chairman of the State Cancer Committee. Under comment four, in his letter, Doctor Warren gives his opinion concerning the importance of having a Cancer Committee in each County Society. In a more recent communication dated January 27, 1941, Doctor Warren has outlined for me reasons for this opinion. He says that the County Committees can survey the situation locally to find out if the local death rate from cancer has increased or decreased in the last ten years; report on availability of Tumor Clinics and availability of X-ray, Radium and Surgical Care in the section. In addition they could determine what part visiting Nurses, Social Workers, Public Health Nurses, Women's Field Army, take in the local care of cancer patients. This information, together with the formation of a Speakers' Bureau, and a County meeting each year devoted to Cancer, would create an active interest in the subject for an increased number of our members and produce valuable data for the State Committee. He further writes that statistics show that twelve out of every 100 males and fourteen out of every 100 females will be victims of cancer; since the death rate from cancer is well over 100 per 100,000 we would expect more than 800 deaths from cancer yearly in Maine. Here is a situation that challenges all practicing physicians. What have we accomplished to date? As an indication of the accomplishments of a Tumor Clinic Doctor Warren has provided me with some figures from the clinic held at the Maine General Hospital. Since organization in September, 1933, to June, 1941, a period of about seven and a half years, 1,258 new cases have been seen. Following the first campaign of the Women's Field Army in 1937, the number of cases reporting to the clinic increased by nearly 100. In 1940 nearly 300 new cases visited the clinic. Surely these few figures from only one of our six Tumor Clinics* demonstrates that the people of Maine are awakening to the importance of early diagnosis and care of cancer.

The State Committee is studying this important question. It is considering proposals for a State-wide plan to solve it. It requests the help of all the members of the Association. Carrying out the suggestions of the Chairman I am asking the various County Societies to discuss the comments in his letter and to show their interest by appointment of County Committees.

THOMAS A. FOSTER, M. D.,
President, Maine Medical Association.

* Page 46 in this issue.

Editorial

Concerning the Future of Medicine

It seems extremely difficult for a great many physicians to grasp the fact that economically and socially evolution is taking place. The pattern of medical service is in process of rapid change. Tax supported medical service plans are increasing. Legislation, both National and state, is presented to the public in alluring terms based entirely on hope. The entire problem is vast and intricate but every change vitally concerns the welfare of every physician and it surely is not becoming easier to establish and maintain an adequate income from the private practice of medicine. While the President is on record as saying there will be no socialized medicine in the United States the fact is that many of the principles of socialized medicine already exist and compete with private practitioners and unless the profession guards and protects its rights further government control will obtain and increase.

The President is quoted as saying, "there can be *no* substitute for the personal relationship between doctor and patient which is a characteristic and a source of strength of medical practice in our land." Every physician knows that such a statement is true and beyond seeming question but it is the philosophy of some, in and out of the profession, to do away with such relationship with patient and physician becoming mere cogs in the medical assembly line. It, therefore, becomes doubly important, when Democratic governments and their ways are not only under severe trial but some fighting for their very existence, that the profession maintain and strengthen this most valuable personal relationship and inform the public not only of our aims and methods but of the dangers inherent in the acceptance of radical changes without sufficient appraisal of the ultimate costs and results. The individual physician can and should do all possible to protect the principles underlying our free institutions but it is the important duty of organized medicine to maintain and warrant the confidence of the public in the profession as a whole so that we can successfully fight and defy the attempts by anyone at any time to

regiment medicine, industry or labor in any form.

As a nation we *are* facing a crisis and all propaganda to the contrary, an adequate defense mechanism and organization must be built and trained that the ways and means of life that have become ours shall go on. It can be denied most emphatically that American Medicine seeks to perpetuate for selfish reasons the position that it has enjoyed. That position has enabled it to bring to the people of the United States a medical and hospital service equalled by *no* country in the world. It would better that service by any means possible and it can be pointed out that our national, state, county and special societies through their journals, stated meetings and graduate extension programs are affording practitioners opportunities for advancement that can well be the envy of those in many lands.

Various happenings give evidence of a shift in the wind. In the operations of the Selective Service Act great responsibility and trust has been placed in the American Medical Association and positions on the various boards carry a warrant that the honor, ability and integrity of the men appointed is without question. It is a matter of record that advice has been freely sought at Washington from organized medicine with many of its suggestions adopted which fact makes it reasonable to believe that the voice of the profession is becoming more authoritative without administrative bodies. That an even closer coöperation between the government and the profession can result in the greatest good for all must be obvious to those who will exercise a little thought. As a profession medicine is numerically small but individually and collectively we can influence to no small degree the safeguarding and protecting the basic principles of "The American Way of Life." The inferences of a *united people* prepared in all ways to defend and maintain their ways of life will not be lost or misinterpreted by those whose methods and philosophies have wrought destruction and misery the like of which the world has never seen.

Completion of Ragweed Survey in Maine

There were two interesting and important fifty-day surveys of ragweed pollen in 1940:

1940	Index	Total	Highest Day	Number of Days 25+
Camden	9	480	68 Aug. 20	6
Newagen	0.55	79	16 Sept. 11	0

The survey of Camden was repeated, as that of 1939 was unreasonably at variance with previous surveys in neighboring areas. An investigation by state health officers of the location of the air sampling station showed a very heavy ragweed growth to the windward. The 1940 collecting apparatus was placed in a more representative location in Camden village. The above findings establish a count consistent with that of neighboring stations to the windward of Penobscot Bay.

The pollen count of Cape Newagen is astonishingly low, and is confirmed in its accuracy by a 1939 count taken under standard methods privately by a trained hayfever patient. Those slides for twenty-five days following August 10, counted by our technician, also rated an index less than 1. The credit for this achievement must be given: first, to the geographic position in an area nearly surrounded by ocean, and the remainder protected by an evergreen forest; second, to the thorough local destruction of ragweed in recent years.

A review of the pollen survey at fifteen different points in Maine for the past four years represents coast and interior, city and country, forested mountain and farming levels. The ragweed incidence can now be considered established. The survey at four widely separated receiving stations has been repeated in different years as a check on seasonal differences. Pollen grain counting at various stations has also been rechecked by different technicians. Valuable coöperation by the State Bureau of Health, and technical supervision by Research Botanist, O. C. Durham, of the Abbott Laboratories, have been maintained for the four years.

The general wind direction during the ragweed season is westerly, and the heaviest pollen contamination of the air is in southwest Maine, where ragweed evidently was first introduced. There is only slight incidence in Aroostook County. It doubtless will extend easterly unless its seeding power is checked. The forested mountains beginning on the state boundary at our Speckle Mountain station, and extending northward and eastward, include the resorts of Rangeley Lake and Moosehead Lake, and have been a protection in portions of the state. The Atlantic Ocean protects on the south and east, while New Brunswick is comparatively free of ragweed.

From the Secretary's Office

To the Members of the Maine Medical Association:

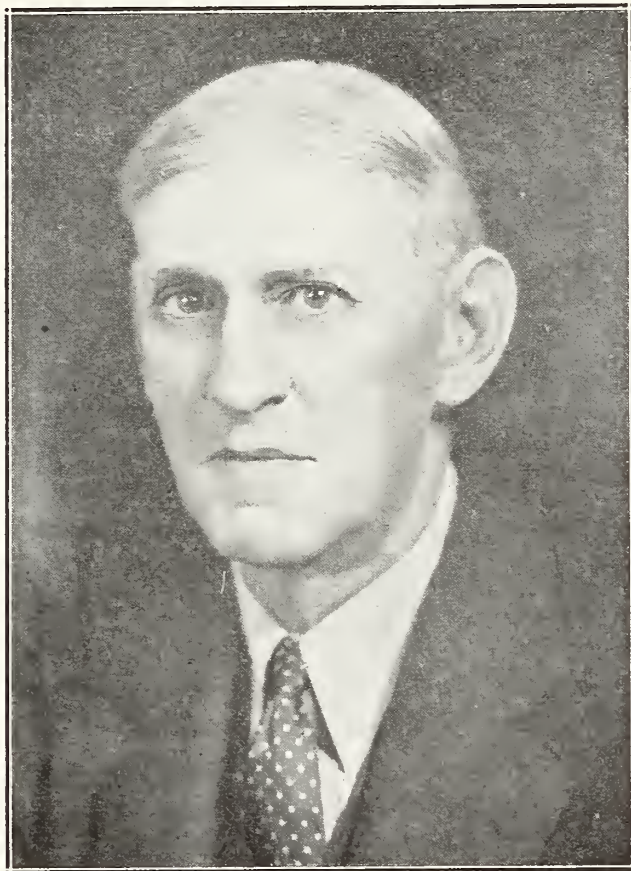
At the Annual Meeting of the Sagadahoc County Medical Society, held at Bath, Maine, January 14, 1941, it was voted to organize a Lincoln-Sagadahoc County Medical Society, which was approved by the Council of the Maine Medical Association in session at Augusta, Maine, December 19, 1940. An initial roster of twenty-three members has been submitted by the Secretary, Jacob

Smith, M. D., of Bath; six from Lincoln County and seventeen from Sagadahoc.

We again call to your attention, under Special Notices, the Panel Discussions Available to County Medical Societies by the Committee on Graduate Education, the Teaching Clinics in Surgery arranged for by the Committee on Graduate Education, and Post Graduate Fellowships made available by The Commonwealth Fund.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

Necrology



*Frank Wilson Lamb, M. D.,
1872-1941*

Frank Wilson Lamb, who died in his office of coronary occlusion on January 20, 1941, was born in Westbrook, Maine on November 4, 1872, the son of William W. and Susan Smith Lamb. He received his early education in his home town schools, graduating from Westbrook Seminary in 1891, and obtained his degree in Medicine from the Medical School of Maine in 1895. Immediately upon graduation, he entered upon the practice of general medicine in Tilton, New Hampshire. At the end of five years, having in the meantime decided to specialize in diseases of the Ear, Nose and Throat, he left Tilton and pursued studies in his now chosen specialty during 1900 and 1901 at the New York Post-Graduate Hospital and in Vienna. In the year 1907, at the suggestion of Dr. H. A. Pingree and the late Dr. E. G. Abbott, Dr. Lamb discontinued his Nose and Throat work and went to Boston for a year to study X-ray Technic under Dr. Ariel George, and, after 1908, he limited his practice to this new specialty. Thus, it may be stated, he became the pioneer physician in Roentgenology east of Boston. In these earlier years as an X-ray specialist he did a prodigious amount of work with Dr. Abbott in developing and perfecting the latter's correction for scoliosis.

In due time, Dr. Lamb became a member of the American Roentgen Ray Society, the Radiological Society of North America, and of the New England Roentgen Ray Society of which he was a past president, in addition to memberships which he held in the Cumberland County Medical Society,

the Maine Medical and the American Medical Associations. His non-professional affiliations were with the Portland Country Club and the Deering Lodge of Masons.

It was my rare privilege to have been rather closely associated with Doctor Lamb for thirty-two years, sufficiently long for us to have known each other root and branch. Throughout those long and happy years I never heard him speak disparagingly of a fellow-physician. Equivocation, retaliation, prevarication, these just never entered his mind. On the contrary, he was an *honest* man who spoke candidly, a *modest* man who bore his honors lightly, a *friendly* man who really was interested in his neighbors and associates, a truly Christian gentleman who, without professing any particular piety, exemplified in his daily life his faith and conviction that "it is better to give than to receive." I never have known an individual who bestowed less thought upon self than he, or one more willing to grant a favor, and that cheerfully, or one more charitable toward the frailties of human nature. Frank Lamb was a prince among men, endowed, I believe, with the disposition of the poet who wrote

"To me Fate gave, whate'er she else denied,
A nature sloping to the sunny side."

He is survived by his wife, Mrs. Grace Bolton Lamb, a daughter, Mrs. Nathaniel Wilson of Augusta, a son, Dr. Henry W. Lamb, an orthopedist of this city, and by three grandchildren.

E. W. GEHRING.

County News and Notes

100% Paid-Up Membership for 1941

Piscataquis County Medical Society, N. H. Nickerson, M. D., Greenville, Secretary.

For the fourth consecutive year credit goes to the members of the Piscataquis County Medical Society for being first with 100% payment of dues.

Lincoln-Sagadahoc County Medical Society, Jacob Smith, M. D., Bath, Secretary.

To the members of this newly organized group goes credit for being second with 100% payment of 1941 dues.

Cumberland

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, January 7, 1941, at 8.15 P. M., with the President, Dr. M. C. Webber, presiding. There were 37 members and 2 guests present.

Dr. S. E. Fisher was made an honorary member of the Club.

Dr. H. E. Macdonald was in charge of the Occupational Therapy Symposium. Cases were reported by Dr. C. M. Robinson, Dr. E. S. Lothrop, Dr. M. S. Thompson, and Dr. H. E. Macdonald. Miss Winifred Smith of the Occupational Therapy Department of the Maine General Hospital told in detail what had been accomplished by occupational therapy in these cases.

Following adjournment, light refreshments were enjoyed.

Respectfully submitted,
ALICE WHITTIER, *Secretary*.

Lincoln-Sagadahoc

The annual meeting of the Sagadahoc County Medical Society was held in Bath on Tuesday, January 14, 1941, with President Grant presiding. At this meeting there was voted an organization of a Lincoln-Sagadahoc County Medical Society thereby uniting the men from both Sagadahoc and Lincoln Counties into one Medical Society. This met with the unanimous approval of the members present from the Sagadahoc County Medical Society and the men from Lincoln County who were present and became members by transfer as follows: From the Cumberland County Medical Society: Philip Gregory, M. D., Boothbay Harbor, Virginia C. Hamilton, M. D., Bath, Neil L. Parsons, M. D., Damariscotta. From the Knox County Medical Society: Robert W. Belknap, M. D., Damariscotta, J. W. Laughlin, M. D., Newcastle, S. R. Lenfest, M. D., Waldoboro. And one new member, William R. Parsons, M. D., Damariscotta.

Officers elected for the ensuing year are:

President, Robert W. Belknap, M. D., Damariscotta.

Vice-President, Edwin M. Fuller, Jr., M. D., Bath.

Secretary-Treasurer, Jacob Smith, M. D., Bath.

Delegate to annual session, Maine Medical Association, Philip Gregory, M. D., Boothbay Harbor.

Censors: Francis Winchenbach, M. D., W. B. Mitchell, M. D., and Joseph I. Smith, M. D.

The meeting was brought to a close with an exceptionally interesting panel on Liver Diseases as presented by Charles W. Steele, M. D., Julius Gottlieb, M. D., and William V. Cox, M. D., of Lewiston, who presented the Medical, Pathological and Surgical Aspects in order. Discussions were opened by Philip Gregory, M. D., Francis Winchenbach, M. D., and Robert W. Belknap, M. D., of the Society.

JACOB SMITH, M. D., *Secretary*.

New Member

Lincoln-Sagadahoc

William R. Parsons, M. D., Damariscotta, Maine.

Change of Address

Aroostook

L. H. Berrie, M. D.

From Houlton, Maine

To Caribou, Maine

Cumberland

Louis A. Asali, M. D.

From 29 Deering Street, Portland, Maine

To 12 Chatham Street, Portland, Maine

Coming Meetings

Cumberland

Cumberland County Medical Association, Eugene E. O'Donnell, M. D., Portland, Secretary.

Friday, March 28, 1941, 7.00 P. M.

The Eastland Hotel, Portland, Maine.

Speaker, Dr. Champ Lyons.

Subject, *Chemotherapy*.

Friday, April 25, 1941, 7.00 P. M.

The Eastland Hotel, Portland, Maine.

Speaker, Dr. Edward B. Benedict.

Subject, *Gastroscopy*.

Kennebec

Kennebec County Medical Association, Frederick R. Carter, M. D., Augusta, Secretary.

Thursday, February 20, 1941, 6.30 P. M.

Sisters Hospital, Waterville, Maine.

Program to be announced.

Have You Paid Your 1941 State and County Dues?

Special Notices

Medical Examiners Appointed by Governor Sumner Sewall

The following physicians were appointed on January 4th by Governor Sumner Sewall as medical examiners:

Androscoggin:

R. A. Beliveau, Lewiston
J. E. Cartland, Auburn
M. S. F. Greene, Lewiston
H. S. Pratt, Livermore Falls

Aroostook:

Frank H. Jackson, Houlton
R. A. Graves, Presque Isle
Francis Faucher, Grand Isle
Albert B. Hagerthy, Ashland

Cumberland:

William Holt, Portland
Wilbur F. Leighton, Portland
William L. Casey, Portland
C. Earle Richardson, Brunswick
J. M. Bishoffberger, Naples
Ervin A. Center, Steep Falls

Franklin:

Harry Brinkman, Wilton
George L. Pratt, Farmington

Kennebec:

John G. Towne, Waterville
Roland L. McKay, Augusta
George W. Alexander, Gardiner
L. D. Herring, Winthrop

Hancock:

Charles C. Knowlton, Ellsworth
E. J. Morrison, Bar Harbor

Knox:

James G. Hutchins, Camden
Herman H. Weisman, Rockland

Lincoln:

George A. Gregory, Boothbay Harbor
Joseph E. Odiorne, Whitefield

Oxford:

John A. Greene, Rumford
D. M. Stewart, South Paris
Kenneth E. Dore, Fryeburg

Penobscot:

Cornelius J. Taylor, Bangor
Herbert C. Scribner, Bangor
H. Lewis Taylor, Dexter
Paul A. Millington, Newport
E. T. Young, Millinocket
G. Frank Woodbury, Patten

Piscataquis:

Albert M. Carde, Milo
Norman H. Nickerson, Greenville

Sagadahoc:

Edwin F. Pratt, Richmond
A. A. Stott, Bath

Somerset:

W. S. Stinchfield, Skowhegan
Frank P. Ball, Bingham

Waldo:

E. P. Goodrich, Winterport
Orris S. Vickery, Belfast

Washington:

Oscar F. Larsen, Machias
James C. Bates, Calais
Alton K. Curtis, Danforth

York:

S. A. Cobb, Sanford
C. W. Kinghorn, Kittery
George R. Love, Saco
J. H. MacDonald, Kennebunk.

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.
2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.
3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.
4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.
5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.
6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.
7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

The Commonwealth Fund

The Commonwealth Fund has made available twenty-eight post graduate Fellowships for the coming year, to be divided among practicing physicians of Maine, New Hampshire and Vermont. Preference will be given to men who have been out of medical school at least five years, who are not more than forty-five years of age and who are engaged in general practice. The fund makes available a stipend of \$250 for each of the months the individual is on Fellowship plus tuition and travel. Applications may be obtained directly from the Commonwealth Fund, 41 East 57th St., New York City, or from the office of the State Secretary. The Director, Dr. Scamman, will be in Maine late in March to interview applicants for these Fellowships so it is suggested that physicians interested make applications as soon as possible.

From the Committee on Graduate Education

Realizing that it is difficult to provide physicians opportunities of keeping abreast of the latest developments the Committee on Graduate Education announces that arrangements have been made for the following teaching clinics in Surgery.

1. Diabetic Rounds starting every Monday, at 8.00, at the New England Deaconess Hospital, on the second floor with the medical and surgical phases of this important disease emphasized by Dr. Joslin, Dr. McKittrick and associates.

2. Head Injuries—Donald Munro, M. D., Chief of Neurosurgery: Boston City Hospital every Tuesday morning.

3. General Surgery (operative clinics)—Howard M. Clute, M. D., Massachusetts Memorial Hospital every Wednesday morning.

4. At the Massachusetts General Hospital every Thursday morning at 8.00, is a Peripheral Vascular clinic; following at 9.00, a surgical clinic; a medical clinic at 11.00 and a clinico-pathological conference at 12.00.

5. Traumatic Surgery—Gordon M. Morrison, M. D., Boston City Hospital every Friday morning.

All the clinics mentioned are held daily with the exception of holidays.

Members of the Maine Medical Association who are interested in these subjects will be welcome at these clinics on the designated days throughout the year and while no formal applications are necessary it is suggested that telegrams or letters be sent to the men in charge in order that the exact hour be known and that they may be on the lookout for those attending. Telegrams or letters can be sent to Dr. Joslin or Dr. McKittrick at the New England Deaconess Hospital, (No. 1); Dr. Munro at the Boston City Hospital, (No. 2); Dr. Clute at 171 Bay State Road, (No. 3); the Massachusetts General Hospital, (No. 4); and Dr. Morrison at 520 Commonwealth Avenue, (No. 5).

Tumor Clinics

Bangor: *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*

Lewiston: *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland: *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*

Waterville: *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

The Charles Hayden Foundation Scholarships

BOSTON, Dec. 28—The Charles Hayden Foundation through its president, J. Willard Hayden, has awarded a grant of \$10,000 (ten thousand) to the Tufts College Medical School to be used for scholarships for selected members of the entering class in that school next fall.

Following the regular plan of the Charles Hayden Memorial Scholarships in other institutions, a portion of this total will be used for outright scholarships during the first year of medical study. The remainder will be held as a special loan fund to be used in upper-class years by those who held Hayden scholarships during the first year.

Dr. Leonard Carmichael, president of Tufts College, in announcing the gift hailed it as a definite benefit to able and worthy young men who might otherwise be debarred from entering the medical profession. He added that the addition of these scholarships will help further Tufts' aims of training young men who look forward to careers as modern general practitioners.

"Since the Tufts Medical School trains more doctors for New England than any other medical school in the country," President Carmichael stated, "the gift will be welcomed by the communities throughout this section, as well as by needy and capable students."

Dr. Cadis Phipps, professor of medicine at the Tufts Medical School, will serve as chairman of the committee administering the scholarship grants.

The American Social Hygiene Association, Inc.

"So Long Boys," a new leaflet about syphilis and gonorrhea, designed for the information of young men about to enter the Army and Navy, was released today by the American Social Hygiene Association.

Written by Dr. Walter Clarke, executive director of the American Social Hygiene Association, this leaflet will give the boy about to join up the essential facts about syphilis and gonorrhea and the prevention of these diseases.

Publication and free distribution of "So Long Boys" is one of a number of projects planned by the Association, in coöperation with the Army, Navy, Public Health Service and other government and voluntary agencies, as part of the national defense program to protect military and in-

dustrial personnel from the health and morale destroying diseases—syphilis and gonorrhea. Fifth National Social Hygiene Day, February 5, will emphasize the need of reducing commercialized prostitution to a minimum and of keeping venereal disease infection rates as low as possible in army, navy and defense industrial personnel.

Social Hygiene Societies, health departments, church and civic groups are urged to see that every young man has a copy of "So Long Boys" before he leaves home. Additional copies may be secured, without charge, from the American Social Hygiene Association, 1790 Broadway, New York, N. Y.

Examinations *American Board of Obstetrics and* *Gynecology*

The general oral and pathological examinations (Part II) for all candidates (Groups A and B) will be conducted at Cleveland, Ohio, by the entire Board from Wednesday, May 28, to Monday, June 2, 1941, inclusive, prior to the opening of the annual meeting of the American Medical Association in Cleveland, Ohio.

Application for admission to Group A, Part II, examinations must be on file in the Secretary's Office not later than March 1, 1941.

Formal notice of the time and place of these examinations will be sent each candidate several weeks in advance of the examination dates.

Candidates for *re-examination* in Part II must make written application to the Secretary's Office before April 15, 1941.

The Board requests that all prospective candidates who plan to submit applications in the near future request and use the new application form which has this year been inaugurated by the Board. The Secretary will be glad to furnish these forms upon request, together with information regarding Board requirements. Address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

Report of the First Annual Medical *Meeting of the National Foundation* *for Infantile Paralysis*

The National Foundation for Infantile Paralysis held its First Annual Medical Meeting at the Waldorf-Astoria Hotel, New York City, on November 7 and 8, 1940. Attending the meeting were the members of the medical advisory committees, the grantees of the Foundation, and the Board of Trustees. Reports of the activities of committees and grantees for the preceding year were presented, and recommendations were made for grants for 1940-1941.

The Foundation is concerned with promotion and furtherance of research on all phases of infantile paralysis. Studies are being carried on through grants from the Foundation on problems of epidemiology, virus research, relationship of nutrition to poliomyelitis, and the prevention and treatment of the disease. In addition, a program of professional and lay education has been promoted.

RESEARCH ON THE VIRUS

The Committee on Virus Research reported that studies were being conducted to determine the

nature of the poliomyelitis virus. Paul F. Clark, Ph. D., the University of Wisconsin, has concentrated the virus infected material obtained from spinal cords of monkeys so that infection may be produced in dilution of one part to ten million. Dr. Hubert S. Loring, Leland Stanford University, who has been studying the purified and concentrated virus, concluded that the virus is protein in nature, or contains protein material. The properties and chemical nature of the virus will continue to be studied.

Drs. John R. Paul and James D. Trask, Yale University School of Medicine, reported the finding of the poliomyelitis virus in stools of patients, contacts, and in sewage collected from epidemic areas. Dr. S. D. Kramer, Michigan Department of Health Laboratories, reported the occurrence of healthy carriers in an institutional outbreak in Detroit. Karl F. Meyer, Ph.D., and Beatrice Howitt, The George Williams Hooper Foundation of the University of California, conducted detailed laboratory studies of material collected from patients, contacts, and the environment during an epidemic in Tacoma, Washington.

Reports were made of the efforts to produce infection with poliomyelitis viruses in animals other than the monkey. This confirmed the previously reported findings of Armstrong to the effect that the Lansing strain could be made to produce infection in various cotton rats. All investigators, excepting Dr. John A. Toomey of the Western Reserve University School of Medicine, reported that only this one strain could be made to produce disease in the cotton rat. Toomey, however, had success in growing, by a special technique, several other old as well as newly isolated strains in the cotton rat. This observation may be of the utmost importance in conducting further clinical and epidemiological studies.

The distribution of the virus in the body was reported by Drs. R. D. Lillie, The National Institute of Health in Washington, Albert B. Sabin, University of Cincinnati, John F. Kessel, University of Southern California, and others. All showed that the virus could be routinely recovered from central nervous tissue of human fatal cases and from experimental animals, and that excepting for tonsils, adenoids, and lymph gland tissue, no other part of the body was shown to harbor the infection.

STUDIES OF IMMUNITY

Studies on the development of active and passive immunities were reported. *All attempts at producing immunity have thus far met with failure.* Dr. Kessel reported that one infection did not routinely protect monkeys from subsequent disease on re-inoculation. He also made the observation that there was but little relationship between the presence of neutralizing antibodies in the blood stream and immunity to the disease.

CHEMOTHERAPY

Studies in chemotherapy were reported by C. C. Young, Ph.D., and Dr. S. D. Kramer of the Michigan Department of Health Laboratories. While they have not found a chemical that will do for poliomyelitis what sulfanilamide has done for certain bacterial infections, leads have been discovered which are now the subject of further investigation.

INVESTIGATIONS OF AFTER EFFECTS

Reports were received from grantees who are studying both the effects of the disease and the methods of prevention of damage. Dr. Donald Young Solandt, University of Toronto, concluded that the muscular fibrillation resulting from nerve destruction is not the primary cause of atrophy

of paralyzed muscle. Dr. Clinton N. Woolsey, Johns Hopkins University School of Medicine, concurred in these results, but Dr. Samuel Soskin, Michael Reese Hospital in Chicago, felt that in the animals which he studied fibrillation did play an important part in the degree of atrophy resulting from nerve destruction.

Physiological changes in muscular atrophy are being studied by Dr. I. Arthur Mirsky at the Jewish Hospital in Cincinnati, by Dr. A. T. Milhorat at the Russell Sage Institute for Pathology in New York, and by Professor Harry M. Hines at the State University of Iowa. None of these has pursued the investigations far enough to warrant any definite conclusions.

Gross and microscopic pathological studies of paralyzed muscles carried on by Dr. Herbert E. Hipps, The Crippled Children Hospital in Marlin, Texas, showed that occasionally muscles developed a band-like form of degeneration, and that when mattress sutures were used to connect the muscle above and below these bands, good functional results were obtained.

Several instruments were presented for the more accurate testing of muscle strengths. Dr. A. A. Schmier, The Hospital for Joint Diseases in New York City, developed a muscle tester and recording apparatus suitable for measuring in pounds and ounces the pulling power of most of the muscles of the body. Dr. Leo Mayer of the same Hospital has developed a table designed to evaluate in the same terms the muscle power of the trunk.

SURGICAL TREATMENT

Several studies have been completed and others are still being conducted that measure the end results of various forms of surgical and conservative treatment. Drs. George E. Bennett and Raymond E. Lenhard, The Children's Hospital in Baltimore, concluded that if the maximum benefits of physiotherapy are to be secured, patients must be under such care within six months of the onset. They further showed that 97 percent of all weakened or paralyzed muscles regain the maximum possible strength within eighteen months after onset of treatment. Dr. William B. Carrell, Texas Scottish Rite Hospital in Dallas, confirmed these observations. In addition, he concluded that rest with physiotherapy in the hospital had no advantage over similar treatments in the home. Hospital care over long periods was of decided advantage only when underwater treatments were used. Dr. Carrell also pointed out the disadvantages of plaster casts continued over periods of from four to six months, even when the patients reported for frequent reapplications of the casts.

The value of rest treatment was further emphasized by laboratory studies on infected monkeys. Dr. Sidney O. Levinson, The Michael Reese Hospital in Chicago, showed that monkeys forced to exercise during the active disease process had not only a greater amount of paralysis but also a higher death rate.

Much work has been done on study of bony deformity, such as scoliosis and unequal leg

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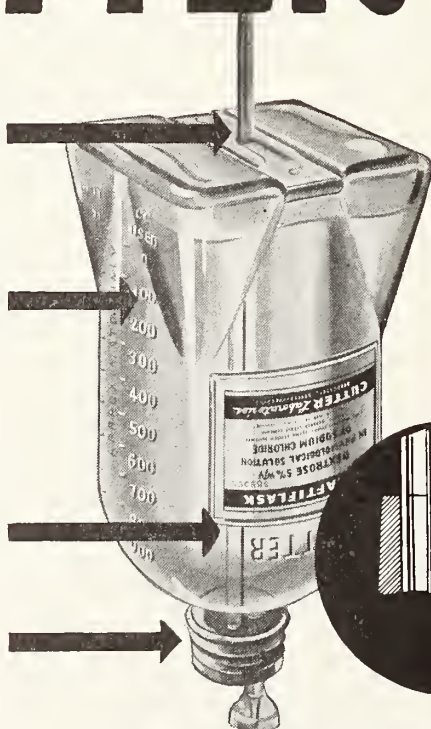
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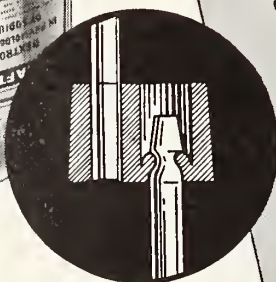
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lengths, resulting from infantile paralysis. Since years of observation of individual patients are necessary, only progress reports could be made at this meeting

EPIDEMIOLOGY

Reports were rendered on the activities of the Foundation in epidemic areas. It is not the purpose of the Foundation to provide medical care to patients, yet it has rendered certain assistance to communities and hospitals by supplying splints, Bradford frames, and by making respirators available. Studies of epidemics were made in a few areas upon the request of and with the consent of the health officers. These studies have progressed only far enough to point the way for more elaborate and exhaustive work of the future.

EDUCATIONAL ACTIVITIES

To inform both professional workers and the public of certain aspects of this disease, an educational program has been conducted. An exhibit at the New York World's Fair was viewed by over five million persons. Scholarships have been made available through the National Research Council to physicians wishing to specialize in orthopedic surgery or virology. Other scholarships have been made available to nurses wishing to specialize in the orthopedic aspects of public health nursing. Graduate instruction in physiotherapy also has been provided.

Booklets have been prepared and widely distributed dealing with the use of the respirator, the nursing care of poliomyelitis patients, and other phases of the problem.

Scientific investigation of the possible relation-

ships existing between the state of nutrition and the development of infantile paralysis has been undertaken. It was not deemed expedient to limit these studies to poliomyelitis, but rather to include the entire field of infectious diseases.

At this meeting additional grants were recommended for continuation of existing studies or new investigations in the amount of \$137,350.00.

As the result of elections, the following chairmen of medical committees were appointed:

The Committee on Virus Research

Thomas M. Rivers, M.D., Director of The Hospital of The Rockefeller Institute for Medical Research, New York City

The Committee on Research for the Prevention and Treatment of After-Effects

Philip Lewin, M.D., Associate Professor, Orthopedic Surgery, Northwestern University Medical School, Chicago, Illinois

The Committee on Nutritional Research

James S. McLester, M.D., Professor of Medicine, University of Alabama School of Medicine, Birmingham, Alabama

The Committee on Epidemics and Public Health

Herman N. Bundesen, M.D., Commissioner of Health, Chicago, Illinois

The Committee on Education

Max M. Peet, M.D., Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan

The Committee of Medical Publications

Morris Fishbein, M.D., Editor, *The Journal of the American Medical Association*, Chicago, Illinois.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

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Medical Personnel to Selective Service Boards

The following changes and additions have been made in the Medical Personnel to Selective Service Boards.

Androscoggin County

Local Board No. 2

Blinn W. Russell, M. D., Lewiston (taking the place of W. L. Haskell, M. D., deceased).

Cumberland County

Local Board No. 2

Richard S. Hawkes, M. D., 21 Deering Street, Portland.

Local Board No. 5

Nathaniel B. T. Barker, M. D., Yarmouth (taking the place of Earle Richardson, M. D., Brunswick).

Harold R. Webb, M. D., Brunswick.

Franklin County

Local Board

Currier C. Weymouth, M. D., Farmington.

Kennebec County

Local Board No. 2

Ivan E. McLaughlin, M. D., Gardiner.

Piscataquis County

Local Board

Norman H. Nickerson, M. D., Greenville.

Washington County

Local Board

Laurence A. Betteridge, M. D., Milbridge.

Donald R. Jacob, M. D., Princeton.

J. W. Longfellow, M. D., Machias.

Allen H. Knapp, M. D., Machias.

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The Journal of the Maine Medical Association

Volume Thirty-two

Portland, Maine, March, 1941

No. 3

*Diabetes: Some Considerations from the Point of View of the Internist**

By SVEN GUNDERSEN, M. D., Hitchcock Clinic, Hanover, New Hampshire

It is quite natural that interest in diabetes has grown a great deal in the last two decades. This can be attributed in a large measure to its successful treatment with insulin. Perhaps not as important as insulin from the practical point of view, but even more interesting and important from the point of view of abnormal physiology, are the more recent discoveries of the relationship of the disease to other endocrine glands. In short, diabetes is not only of great significance in the metabolic field, but has also captivated the interest of the endocrinologist. The enlarged scope of the subject, therefore, places necessary limitations on the present discussion and it is for this reason that I have chosen to lay emphasis on only certain parts of the subject, with especial emphasis on some of the more recent developments.

Even though the ancients recognized diabetes as a special syndrome, it remained for the chemists and physiologists of the last half century to point out the true nature of the altered carbohydrate metabolism. The discovery of insulin by Banting and Best was only nineteen years ago, and the so-called

Hagedorn era, named in honor of the discoverer of protamine insulin, goes back only four years.

Because of our steadily decreasing birth rate and the steadily increasing average age incidence of our population, life insurance companies are beginning to remind us that we are becoming a "nation of elders." Since most patients develop diabetes in the fifth to seventh decades, we may confidently expect a gradual increase in the incidence of the disease over the present probable figure of 3/10 of 1% of the whole population.

The importance of heredity, obesity and race in the etiology of diabetes is well known and requires no further comment. There has been much suggestive evidence of the importance of endocrine glands other than the pancreas in the pathogenesis of the disease for many years, but it is only recently, mainly as a result of the work of Houssay in Buenos Aires and of Young in London, that it has been put on a firmer experimental basis. The former has shown that the experimental removal of the pituitary gland results in a greatly increased sensitivity to the hy-

* Presented at the Medical Conference at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 24, 1940.

poglycemic action of insulin. The effect in *certain* animals, at least, has been shown to be due to the removal of the anterior lobe. Hypophysectomy, previous to or following pancreatectomy, usually diminishes the severity of the diabetic condition resulting from the removal of the pancreas only. The injection of suitable anterior pituitary extracts into normal animals results in the appearance of the symptoms of diabetes, disappearing in varying periods of time after the cessation of injections. Young has been able to produce a permanent diabetic state in dogs by the intraperitoneal injection of extracts of the anterior lobe of the pituitary gland. These results were accomplished by increasing the injected amounts after each three-day period, so that finally the extract of 25 grams of tissue was injected daily. These dogs have been made permanently diabetic in from eleven to thirty days of treatment. The amount of insulin needed to regulate the glycosuria in such animals is considerably greater than in the depancreatized dog. On the other hand, if given sufficient food, such dogs with pituitary diabetes are able to survive long periods without insulin.

Young has found important changes in the islands of the pancreas, ranging all the way from depletion of the cytoplasmic granules of the beta cells to complete replacement of the hyaline material.

What is the possible significance of these experiments in regard to human diabetes? It appears that cases of relative insensitiveness to insulin are probably of the pituitary type. Also, the severity of the diabetes would seem to be determined by the activity of the anterior lobe; but under stable conditions, it is likely that the pituitary is secreting no more than the normal amount of diabetogenic principle. Could a case of human diabetes, resulting from lesions of the pancreatic islands, be primarily of pituitary origin? If these animal experiments can be used for analysis of the cause of human diabetes, it seems entirely possible that, even though no obvious indications of pituitary hyperactivity exist, the lesions of the pancreatic islands may nevertheless have originated as the result of a short period of over-activity of the anterior pituitary.

There is still a considerable proportion of

diabetic cases coming to autopsy in which the pathologist is unable to demonstrate any definite anatomical changes in the pancreas. The proof that the islands are capable of regeneration is an important contribution that has led to a changing conception of the pathology of the pancreas. The conception which views the lesions as a result of the balance between regenerative and degenerative forces, has been a sounder and more useful one. In many instances, then, we are forced to admit that the function of the gland can be suppressed without anatomical changes.

The rate at which the diabetic is capable of oxidizing glucose is quantitatively reduced. There is also a quantitative reduction in his ability to store glucose as glycogen, especially in the liver. The reduced rate of oxidation and storage is dependent in the final analysis on the decreased amount of available insulin. It appears that the important conception is to regard the carbohydrate tolerance of a diabetic as a changing factor. The mild diabetic has normal fasting blood sugar; but as the severity of the disease increases, so is the fasting blood sugar higher. A fasting blood sugar of 150 milligrams per cent, or above, is safe presumptive evidence of diabetes. The blood sugar level is balanced on the one hand by absorption and glycogenolysis, and on the other hand by storage, oxidation and excretion. The diabetic who has partially lost the stabilizing influence of insulin in storage and oxidation, develops a prompt hyperglycemia after ingestion of carbohydrate, followed by glycosuria, of course, if the renal threshold is exceeded. The latter may be extremely variable, whether the individual has diabetes or not; so that one may run the gamut of true renal glycosurics to diabetics and to combinations of the two. Older diabetics may have a renal threshold for glucose of 300 milligrams per cent or more.

The glucose tolerance test has for many years been the final court of appeals in making the diagnosis of diabetes, or no diabetes, in borderline cases. Following the oral administration of from 50 to 100 grams of glucose, both the height of the peak of the curve and the time for the curve to reach the fasting level, are important points to be considered. Many of you, however, have probably had unfortunate experiences in regard

to this test, with results in the same patient on repeated examinations being not at all comparable. For this reason the test has fallen into disrepute and many men have been unwilling to rely on the evidence obtained from it. It is fortunate that this dilemma has been explored and cleared up in recent years. The diet of the patient for a few days before the test is the important factor to control. Interestingly enough, even normal individuals who have been partly depleted of their glycogen reserve by a low carbohydrate diet, will give a diabetic type of curve; whereas mild diabetics on similar low carbohydrate diets may give the findings of a severe diabetic. To obtain a truthful result, there should be no restriction of carbohydrate for several days before the test.

Stadie has recently done some convincing and important work in regard to the metabolism of fat, which makes it necessary to dismiss the time honored theory of beta oxidation proposed by Knoop at the turn of the century. Stadie has demonstrated clearly that acetone bodies do not need to be burned in the fires of carbohydrate. Diabetics in acidosis simply are producing larger amounts of acetone bodies from excessive metabolism of fat than the muscles can take care of for the usual oxidation to carbon dioxide and water.

The altered metabolism of fat in diabetes is often manifested by marked degrees of lipemia which can be diagnosed simply by withdrawing a sample of blood and watching the cream-like layer separating out above the red cells. Such lipemia is always associated with hyperglycemia and is an evidence of unsatisfactory control of the diabetic state. High levels of cholesterol—that is, values above 250 milligrams per cent—are also seen in diabetes. Joslin and his co-workers have been especially interested in this finding in recent years and have advanced the opinion that it may be largely responsible for the early development of arteriosclerosis in diabetics. In their opinion, high cholesterol values are probably even more important than the blood sugar findings in judging the satisfactory regulation of a diabetic patient.

The diagnosis of diabetes does not offer many difficulties, as a rule. The finding of glycosuria, however, in a patient presenting

the classical symptoms, should be supplemented with a fasting blood sugar test and, if necessary, a sugar tolerance test. If lactosuria, the rare pentosuria and the other causes for glycosuria, such as hyperthyroidism and intercranial lesions, are kept in mind, there will rarely be any important mistakes.

Classification of the diabetic state is not always possible because of its tendency to change. We usually think of mild cases as those which can be satisfactorily controlled by diet alone; moderate cases, which require thirty units of insulin or less per twenty-four hours; and severe cases as those requiring more than thirty units. Proper diabetic control means approximate freedom from glycosuria and ketonuria, normal blood sugar and cholesterol levels and maintenance of body weight.

Prior to 1921 diabetics, as a rule, lived only a few years and died usually in diabetic coma or from infection. Thanks to insulin, diabetics in the Banting era, if satisfactorily controlled, have reasonable expectation for a comfortable and useful life. The causes of death now are almost always to be traced to complications of the disease, especially arteriosclerosis involving the coronary vessels and those of the lower extremities. Deaths from diabetic coma are hardly excusable in 1940 unless treatment has been instituted late or the coma has been brought about by some serious underlying infection.

Undertaking to treat a patient with diabetes is one of the most important challenges that a physician has to face. I know of no other condition which requires more complete understanding and coöperation between patient and physician. Here is a situation that requires the utmost patience and the most exacting attention to details. If the physician is unable or unwilling to spend the time and effort, the patient almost always comes to grief. Furthermore, there is no other disease that requires as much study and effort on the part of the patient.

Ever since the introduction of insulin, there has been a definite trend to increase the amount of carbohydrate and to decrease the amount of fat in diabetic diets. The carbohydrate tolerance of a diabetic is usually improved most when the diet contains from 150

to 250 grams of carbohydrate. The blood cholesterol value is usually kept at the most satisfactory level when the fat in the diet does not exceed 75 grams. The Montreal group strongly believes in keeping it at an even lower level; that is, about 50 grams. It is still too early to be sure, but suggestive evidence is accumulating to the effect that such diets are leading to a lower incidence of cardiovascular disease. The diet for the diabetic can be simple and satisfactory, but must be individualized and specific. It is possible to guard against deficiencies by emphasizing the use of whole grain breads and cereals and the five per cent vegetables and fruits. The diabetic diet is not much more expensive than other good diets, and becomes less expensive, of course, as the carbohydrate is increased. The diabetic tolerates more carbohydrate if he eats often, the utilization of carbohydrate improving as the day progresses. Accordingly, small feedings of carbohydrate, from 10 to 20 grams, are advisable in the morning, in the afternoon and in the evening. The remaining carbohydrate in the diet is best divided by using one-fifth for breakfast, two-fifths for dinner and two-fifths for supper. Such a combination requires the least insulin.

The normal individual is constantly receiving a supply of insulin from the pancreas. It plays an essential part in the storage of glucose as glycogen, especially in the liver, and in the oxidation of glucose. The hormones of other ductless glands — namely, pituitrin, thyroxin and adrenalin — exert an antagonistic action to insulin, either directly or indirectly. The resulting blood sugar level is a balance between the two forces. One clinical unit of insulin is one-third of the amount necessary to lower the blood sugar of a two-kilogram rabbit to the convulsion level. In clinical practice, one unit of insulin will burn from one to six grams of carbohydrate, depending on the severity of the diabetes. Hagedorn, in 1935, found the answer to the need for a more slowly acting insulin by combining it with protamine, and this product has been made even more efficient by the addition of a small amount of zinc. There is no question that protamine zinc insulin keeps a diabetic in a much more satisfactory state of regulation than the old insulin. The need for fewer injections is another boon to the

patient. Mild and moderately severe diabetics will usually get along on one injection of protamine zinc insulin, administered 30 to 45 minutes before breakfast. In this situation, the blood sugar is usually lowest before breakfast, rises slowly in the late forenoon, and more strikingly after the noon meal. It then drops rather rapidly during the later afternoon hours and falls slightly lower by early evening. During the night, the tendency for the blood sugar is to go downward, reaching the lowest point in the early morning, shortly before breakfast. The hypoglycemic reactions from protamine insulin are rather more difficult to control than those from unmodified insulin. They occur usually during the late night hours or before breakfast. Their symptomatology differs from the ordinary insulin reaction, in that headache occurring before breakfast and relieved by eating is characteristic. Some of the moderately severe diabetics will require a dose of crystalline insulin along with the protamine insulin before breakfast, or possibly before the noon meal, in anticipation of the hyperglycemia early in the afternoon. One should never hesitate using insulin in a diabetic if it is at all necessary. It saves the pancreas and there is never any harm from it when used intelligently. It always produces the desired effect if enough is given. It is not contraindicated in coronary cases, but here it is especially important that the control is as near perfect as possible. Diabetics should never omit insulin unless the urine is consistently sugar-free. *There is no effective oral preparation that can be substituted for it.* It is desirable and wise to use protamine zinc insulin alone, if possible. Usually only two-thirds to three-fourths as many units of protamine insulin will be necessary as of unmodified insulin. If unmodified insulin is necessary in addition to the protamine insulin, it appears wiser, on present evidence, to use the crystalline insulin rather than the old regular insulin. Crystalline insulin is purer, gives more consistent results, has a slightly longer effect and has the advantage of producing no protein sensitization.

Exercise is exceeded in importance only by diet and insulin in the management of a diabetic. It should be taken regularly and in well standardized form. The importance of

exercise in the oxidation of glucose is best realized when we recall that a common cause for insulin reactions is usually prolonged or hard exertion. The maximum benefit for the diabetic from exercise will be obtained when it is begun about one hour after the completion of a meal. From similar lines of reasoning, the diabetic will get the maximum benefit from rest periods when they are instituted shortly before each meal.

The treatment of a diabetic in acidosis should be considered a real medical emergency and, as pointed out before, there is little justification today for the death of a case of uncomplicated diabetic coma. The important indications are to relieve dehydration and promote the acceleration of oxidation of carbohydrate by insulin. The initial dose of the latter should be between 20 and 100 units of unmodified insulin, depending on the severity of the acidosis, the presence or absence of infection, and the previous insulin requirements. Subsequently, at hourly intervals for two or three hours, one-half of the initial dose of insulin will usually be required. From that point on, smaller doses of insulin can be given approximately every two hours. Most cases of acidosis will need between 150 to 300 units of insulin during the first 12 hours. Gastric lavage, external heat, parenteral fluids and the administration of extra carbohydrate are other measures which are usually necessary. Frequent estimations of the blood sugar, the carbon dioxide combining power and urinalyses are very desirable, if not essential, for the proper handling of the case. When facilities for doing blood chemistry are not available, it is surprising how well one can get along simply by a careful check on the urinary findings. The Joslin group question the advisability of giving additional carbohydrate during the first twelve hours, but it certainly can do no harm, it avoids the danger of hypoglycemia and results in greater oxidation of carbohydrate.

The diabetic child deserves special consideration and care, inasmuch as it is a growing organism. The diet should be readjusted at yearly intervals, or oftener, and overweight must be carefully avoided. The protein requirement is inversely proportional to the age of the child, so that the younger children usually need from four to five grams per kilo-

gram of body weight; whereas the older children need from two to three grams. This is to be contrasted with the adult requirement of one and one-quarter grams of protein per kilo. A child of one year of age will usually need 1000 calories, and for each additional year it is a convenient rule of thumb to add 100 calories. White recommends two grams of carbohydrate to each gram of protein and each gram of fat. Diabetic children need insulin continuously, 90% of them requiring a combination of protamine and crystalline insulin in proportions of two to one. Diabetic coma is a commoner complication in children. Hepatomegaly, which is a rather frequent complication, can be corrected and prevented by the use of protamine insulin. Diabetic xanthomata usually disappear nicely on reducing the fat levels in the blood to relatively normal figures by reducing the fat in the diet. Arteriosclerosis is still a serious complication in the handling of children. The pseudo-dwarfism, occurring in 10% of the cases, is most likely due to a pituitary deficiency and is beginning to respond to hormone therapy.

There is still a high incidence of sterility in diabetics, and the fetal mortality in diabetic mothers remains high. Toxemia of pregnancy develops in an astoundingly rapid manner. Recent evidence makes it seem very likely that this situation is due to a failure in the metabolism of the hormones. Some very encouraging results are now being reported by White in the treatment of pregnant diabetic women with enormous doses of Progonon and Proluton.

Joslin's work has been extremely important in teaching us the value of the meticulous care of the diabetic. A case cannot be considered to have been treated properly unless the patient himself knows something of the nature of his disease and the importance of diet in its treatment, the commoner complications and how they can be avoided, the proper administration of insulin, the recognition of insulin reactions and their prompt treatment, the examination of the urine for sugar and for diacetic acid, what to do about diet and insulin if glycosuria or acidosis appear, and how to care for the feet. A diabetic, under careful management, will always carry an identification card and always have some

Continued on page 70

*A Cardio-Vascular Problem with Renal Involvement and Hypertension**

By JULIUS GOTTLIEB, M. D., and CHARLES W. STEELE, M. D., Lewiston, Maine.

DR. CHARLES W. STEELE:

This patient was a 41-year-old, married, white elevator operator who complained of shortness of breath, epigastric and low precordial pain.

Present Illness: Two weeks before the last hospital entry, while operating an elevator he was seized suddenly with severe, prostrating epigastric pain which was associated with nausea, vomiting, weakness, sweating and shortness of breath. The epigastric pain was localized and constant at first but later radiated to the lower sternal area and up into the neck and down both arms. He walked home from work and went to bed. The pain gradually subsided during the day to a substernal ache. On the following morning he attempted to work but had to stop because of recurrence of epigastric pain during the ensuing twelve days. Considerable frothy pink sputum had been expectorated, and he had developed swelling of the face, hands and ankles. There was a sudden attack of shortness of breath with great difficulty in breathing, marked cyanosis of the lips, hands and feet on the morning of admission to the hospital.

Past History: He had the usual childhood diseases, and influenza in 1918. Three years ago he developed abdominal symptoms characterized by gas, flatulence and epigastric distress which came on three or four hours after meals. These symptoms grew worse and he was admitted to the hospital March 4, 1938, where an X-ray was reputed to have shown an ulcer at the pylorus. Sippy treatment was instigated and the symptoms disappeared promptly.

He was readmitted to the hospital November 19, 1939, because of severe left upper quadrant pain which radiated downward into the left groin. His local doctor reported the finding of blood in the urine. There had been a slight cough productive of some blood

streaked sputum for two weeks. Physical examination at this second hospital entry revealed a hypertension of 190/130, enlargement of the heart to the left at the apex, enlargement of the liver, hematuria, pyuria and cylinduria. Chest X-rays showed some enlargement of the heart to the left at the apex, but the lung fields were clear. Retrograde pyelograms were negative. He was discharged with a diagnosis of hypertension and pyelonephritis.

Physical Examination at the Last Hospital Admission: T. 98; P. 128; R. 30. The patient was a moderately well developed and nourished male who was restless, dyspneic, orthopneic, cyanotic and apprehensive. His pupils were small but reacted to light and accommodation. The eye grounds were not observed. Both lung fields were filled with coarse and medium bronchial rales mixed with some squeaky sibilant rales. No abnormal breath sounds or dullness was noted. Heart was enlarged to left with the point of maximum impulse in the fifth intercostal space 10 cm. from the mid-sternal line. The sounds were of fair quality. $A_2 \vee P_2$. No murmurs were heard. Blood pressure was 180/120. The liver was enlarged and the edge palpable and tender $2\frac{1}{2}$ fingers-breath below the costal margin. No fluid wave or shifting dullness was demonstrated in the abdomen. There was some edema of the feet, ankles and fingers.

Course in the Hospital: The patient's general condition improved some during the first three days with nasal oxygen and rapid digitalization; but the urinary output remained low. On the third hospital day dullness on percussion and fine to medium crepitant rales were noted anteriorly and posteriorly over both upper lung fields while the lower lung fields remained clear. There was no fever and no cough accompanying the abnormal

* Presented at the Clinico-Pathological Conference, Maine Medical Association Annual Session, Rangeley Lakes, Maine, June 24, 1940.

ESSENTIAL HISTOLOGICAL FINDINGS

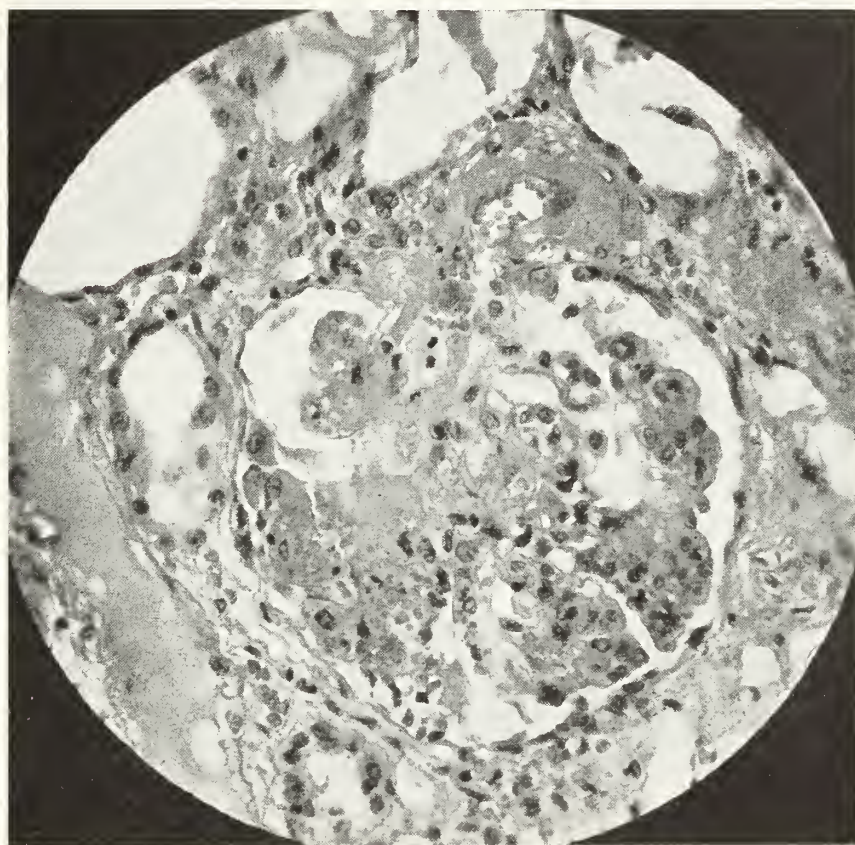


FIGURE 1 x 263

Figure 1. Section of kidney showing glomerulus and afferent arterioles with glomerulus enlarged. The capsular surface is practically obliterated by adhesions to the glomerulus tuft. Capsules of the glomerulus tuft in areas show aneurysmal dilatation, rupture of the basement membrane and frank hemorrhage. In other areas the capsules are fused and obliterated by a proliferation of

endothelial cells. The afferent arterioles show a gaping lumen, containing red blood cells. The finer details of the wall of the arterioles are lost due to a saturation of the wall by a plasma. Few bordering tubules contain precipitated protein. The bordering interstitial tissue is both edematous and necrosed.

lung changes. Despite the slight cardiac improvement the N. P. N. continued to rise and he died in uremia seven days after his last hospital entry.

Laboratory Findings: Hgb. 53%, R. B. C. 2,570,000, W. B. C. 11,400, Differential—Polys. 80, Lymphs. 13, Monos. 7. Kahn negative. N. P. N. 9/8/39 - 111 mgs.%; 9/10/39 - 200 mgs.%; 9/11/39 - 166 mgs.%; 9/12/39 - 160 mgs.%; 9/13/40 - 250 mgs.%. *Urine:* Amber, acid, specific gravity 1.015, trace of albumin, no sugar; sediment: rare wbc and abundant rbc, and few granular casts. *X-rays:* Portable X-ray of the chest taken three days after entry showed irregular mottled areas of decreased radiance throughout both lungs, and interpreted by the Roentgenologist as consistent with extrinsic multiple areas of bronchopneu-

monia. Electrocardiograms taken 9/7/39 and 9/9/39 both showed sinus tachycardia and left axis deviation, but a comparison of lead two and lead three showed that there had been a definite change in contour of the two T waves. Hence, an electrocardiographic diagnosis of coronary thrombosis was ventured.

Clinical Diagnoses at the Time of Death were:

1. Chronic glomerular nephritis with acute exacerbations and death due to uremia
2. Hypertension
3. Hypertensive heart disease with left ventricular hypertrophy
4. Coronary artery thrombosis and cardiac infarction .

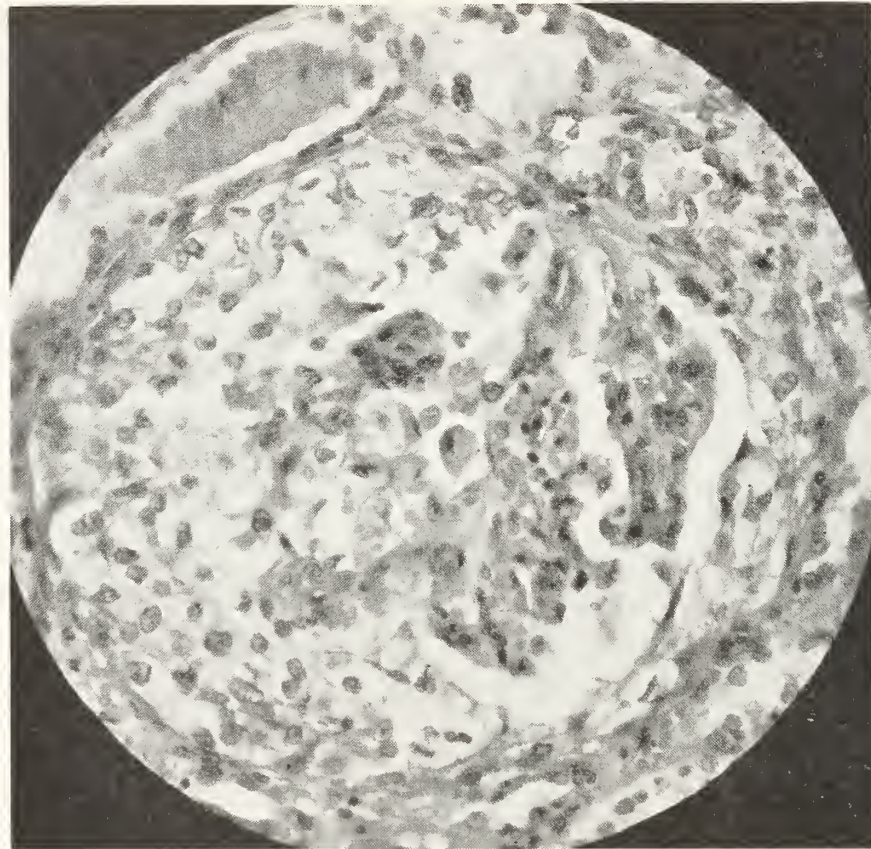


FIGURE 2 x 263

Figure 2. Section of kidney showing an isolated glomerulus. The glomerulus is large. The outline of the capsule is distended and indistinct. A proliferation of capsular epithelium forming a half moon partially obliterating the capsular surface and compressing the remainder of the glomerular tuft. The glomerular tuft is avascular. The capillaries are collapsed and show a proliferation of

endothelial cells. The basement membrane of the capsule in places is lost. In such areas the epithelial cells of the capsule are inseparably attached to the bordering stroma. A single tubule adjoins the glomerulus. This is dilated and contains precipitated protein and cells. This lesion is considerably older than that of figure 1.

DR. J. GOTTLIEB:

ANATOMICAL FINDINGS

The *heart* weight is 620 grams, presents a globular form with the right auricle markedly distended. The pericardial cavity is obliterated in most instances by moderately firm adhesions, presenting frequent areas of pocketing of a fibrinous fluid, the total amount of which approximates 75 c.c. Right heart appears markedly distended, chambers are occupied by a large excess of dark bloody fluid approximating 1,000 c.c., clotting within ten minutes. The organ was removed in toto and injection studies employing the Schlessinger technique were done. The right side of the heart injected well; the left poorly (Figures 6 and 7). The texture of the heart was generally firm and in many situations presented

gross areas of scarring, particularly of the left ventricle. The left ventricular wall notwithstanding was markedly hypertrophied measuring up to 2½ cm. in thickness. Chordae tendinaea and papillary muscles were well defined. Endocardium presented frequent petechial hemorrhages, region approximating the apex showed an area of considerable softening. Valves were not remarkable.

Right lung weight 770 grams; left 675 grams. Lobules of induration and consolidation were encountered in both, in some instances these lesions are discrete but often confluent. An occasional bronchus is occupied by purulent mucoid material.

Liver weight 2,050 grams, firm and nutmeg in appearance on section.

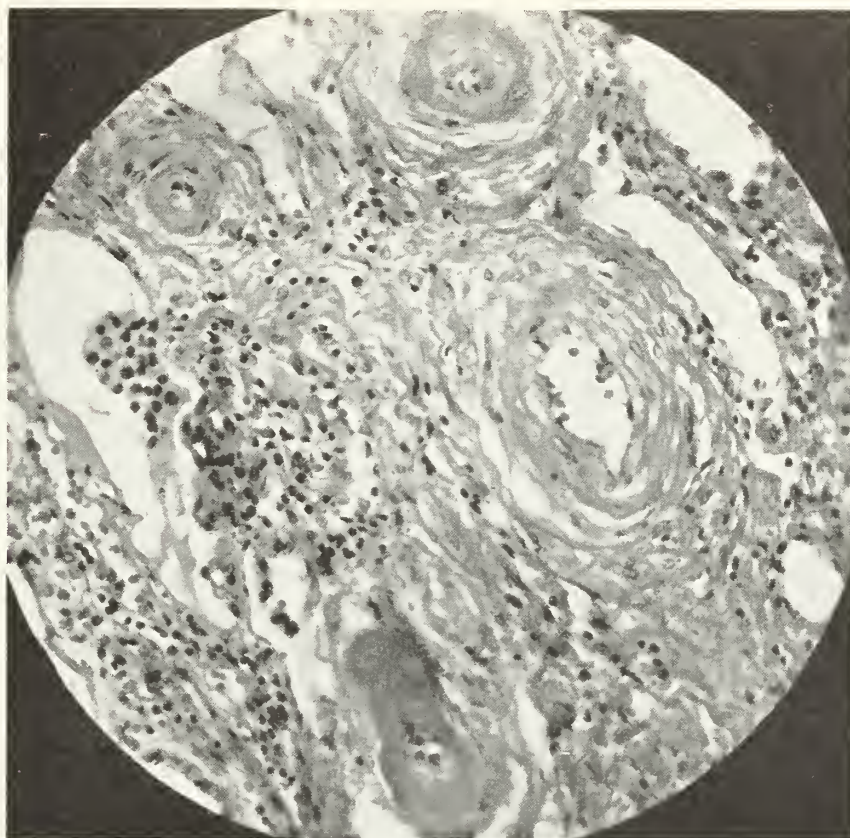


FIGURE 3 x 226

Figure 3. Section of kidney showing in cross section four vessels embedded in connective tissue, richly infiltrated with lymphocytes and occasional polymorphonuclear leukocytes. The wall of the largest of the four vessels is composed of concentric lamina of spindle cells and collogin fibrils which blend at the periphery with the adjoining connective tissue. Two of the smaller

vessels show a somewhat similar picture. One of the latter is obliterated and appears merely as a whorl of cells and fibrosed. The most striking lesion is seen in the remaining vessel, here the lumen is narrow, almost completely obliterated. The wall is wide, thickened and represented by a cloud-like mass of fibrin. In this vessel the normal structure is completely absent.

Kidneys weight 490 grams, capsule is adherent in many situations. Stripped surfaces present frequent minute petechial hemorrhagic areas of pin-point to pin-head dimensions. Cortices are well differentiated, measuring from 6 mm. to 8 mm. Elsewhere gross examination is relatively negative.

Pathological Diagnosis:

Malignant Nephrosclerosis or Disseminated Necrotising Pan-Arteritis
Uremic Pericarditis
Multiple Foci of Infarction, Old and Recent
Coronary Sclerosis
Left Cardiac Hypertrophy
Chronic Passive Congestion of Lungs with Induration and Recent Hemorrhages
Bronchopneumonia
Pulmonary Infarction with Organization of Blood in Alveoli

Bilateral Pleurisy with Effusion

Passive Congestion of Liver

Hemorrhagic Central Necrosis of Liver Lobides

Chronic Passive Congestion of Spleen

No Evidence of Old or Recent Gastric Ulcerations

PATHOLOGICAL DISCUSSION

DR. JULIUS GOTTLIEB:

The poor visualization of the left heart, figures 6 and 7, immediately direct attention to coronary pathology. The major vessels on dissection, however, were not remarkable and as proven histologically, the lesions were primarily of the arterioles. On dissection, it is probable that a recent obstructive clot was dislodged during the examination of the left coronary vessel. The coronary pattern in this



FIGURE 4 x 44

Figure 4. Section from heart taken in the region of the epicardium to show a cross section of one of the large branches of the coronary vessels. The most striking picture is the narrow and nearly obliterated lumen, the result of a pro-

liferation of sub-endothelial tissue. This sub-endothelial layer is composed of fibroblasts embedded in a mucinous ground substance. Here and there fibrile formation is recognizable.

instance is one wherein both branches "terminate" at the interventricular septum; the right coronary arterial tree is sharply visualized with no hiatus of arborization of the right musculature. It is for this reason that multiple infarcts of varying ages could be present. This coronary pattern offers the best prognosis in the presence of coronary occlusion. In coronary disease involving patterns wherein either the right or left coronary artery issues major branches to the opposite heart survival beyond one or two infarctions are rare. Hearts in malignant nephrosclerosis do not hypertrophy to dimensions present in cases of benign hypertension for the reason that death ensues relatively early unless superimposed on the benign type.

It is significant to note that once symptoms of uremia supervene death occurs within a relatively short period as contrasted with the chronic type of uremia encountered in benign nephrosclerosis or of chronic glomerular ne-

phritis. In the presence, therefore of disseminating necrotising arteriolitis beginning uremia is a terminal fatal symptom.

CLINICAL DISCUSSION

DR. CHARLES W. STEELE:

This patient presented a most difficult problem in clinical diagnosis. It was felt at the time of death that chronic glomerular nephritis with acute exacerbations would best explain the urinary findings and the hypertension with the subsequent cardiac hypertrophy and the coronary thrombosis with cardiac infarction. No attempt was made on the above bases to explain the gastrointestinal symptoms encountered 3 years ago, while the chest signs noted four days before death remained undiagnosed.

The pathologist demonstrated that this reasoning of the clinician was not entirely correct since the basic lesion was generalized

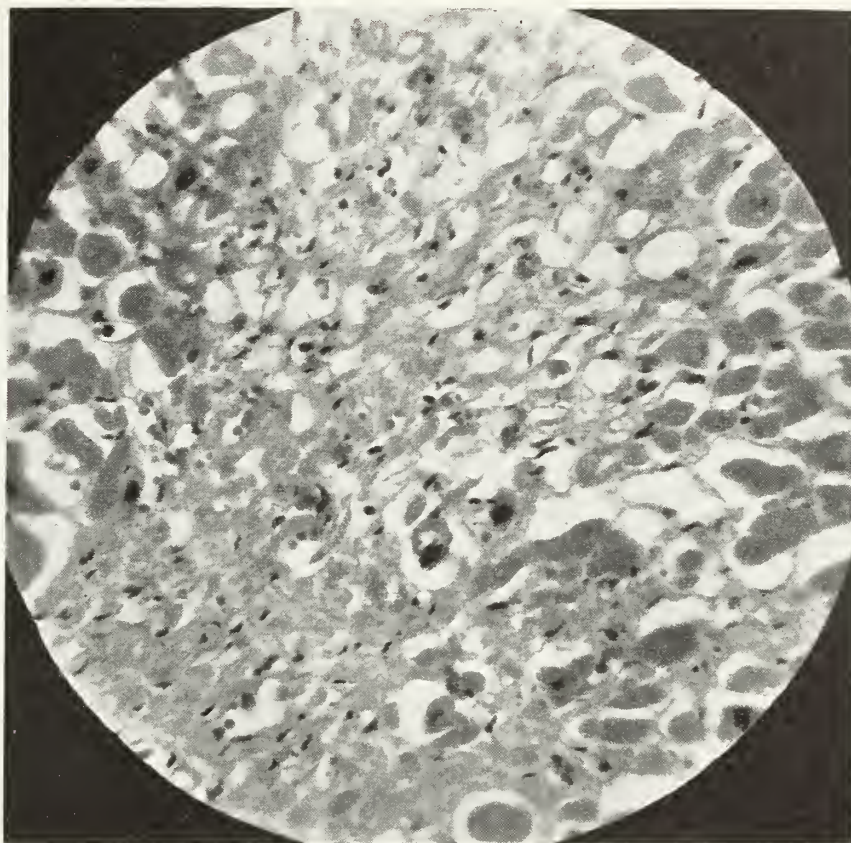


FIGURE 5 x 205

Figure 5. Section of heart to show an area devoid of heart muscle fibers together with an increase in fibrous tissue. The adjacent heart muscle fibers seen for the most part in cross sec-

tion vary considerably in size, in shape and in tinctorial reaction. There is a slight cellular infiltration into this area of scarring.

arteriolar sclerosis with extensive evidence of old as well as recent thrombosis and infarction involving especially the kidneys, heart, lungs and gastrointestinal tract. Actually, then, the hypertension developed first while the kidney and heart lesions occurred later as a result of arteriolar sclerosis. The pathologist has made it possible to explain all the signs and symptoms including the gastrointestinal and pulmonary ones on hypertension and arteriolar sclerosis.

This case seems to illustrate certain important points. Whenever logically possible, signs and symptoms are generally best explained on a single clinical or pathological basis. It would seem proper to re-emphasize that at first, in essential hypertension (especially when it is in the malignant phase) the

vasopressor action may be of dramatic onset and of sufficient intensity to produce grave local symptoms and signs. As would be expected, the nervous and cardiorenal systems are usually most articulate in their protest against such a disturbance in their blood supply, but it is well to remember that extensive arteriolar changes and infarctions are frequently encountered in the stomach, duodenum and lungs. Exacerbations and remissions may be frequent and may last from a few weeks to a few months. Consequently, the clinical pattern may be diverse and quite varied. Finally, it should again be recorded that the malignant form of essential hypertension most often makes its appearance in the third decade of life and it generally runs a rapidly fatal course.



FIGURE 6

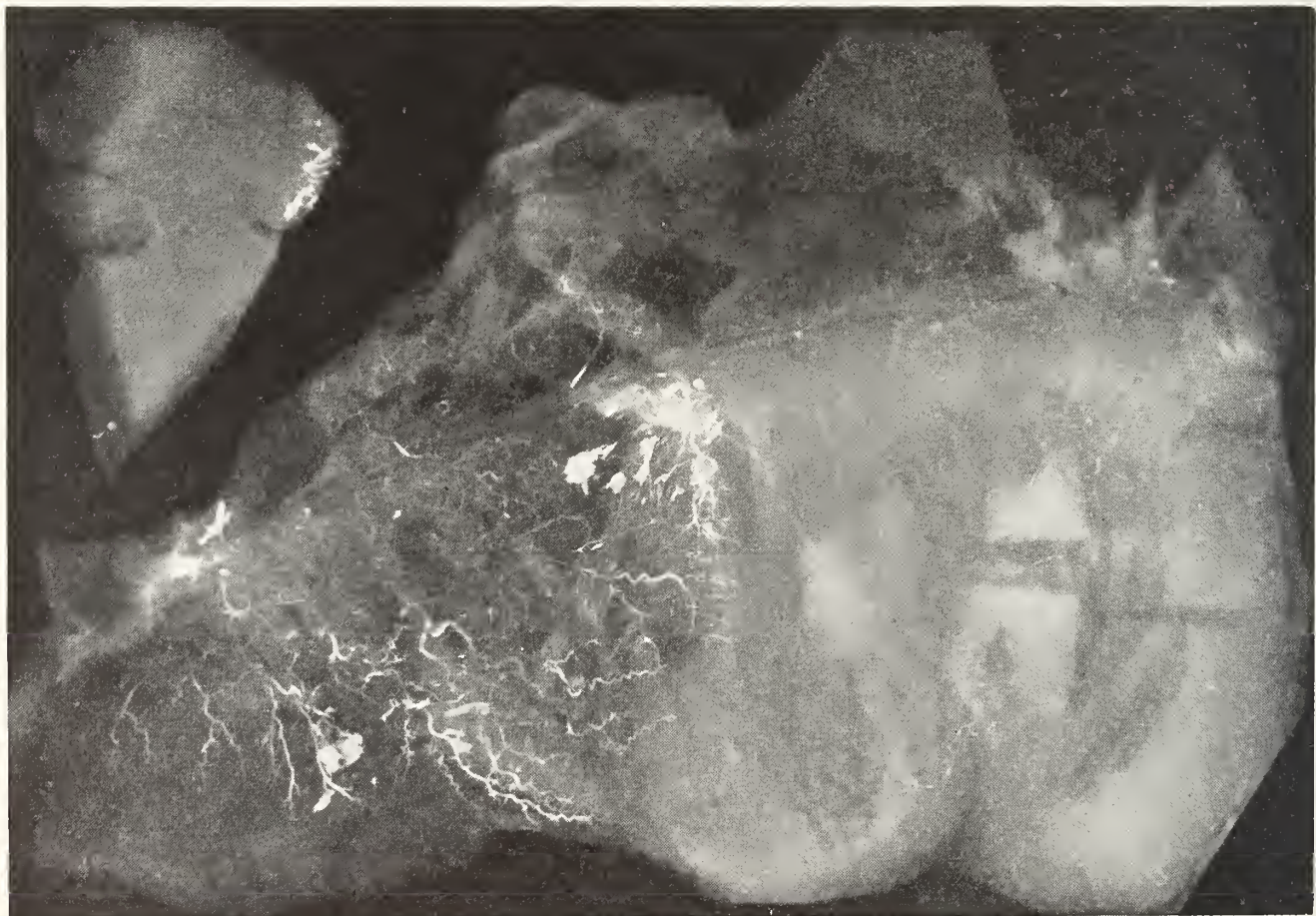


FIGURE 7

*A Case of Blood Dyscrasia Presenting Clinical and Pathological Problems**

Edited by JULIUS GOTTLIEB, M. D., Lewiston, Maine.

DR. RICHARD P. LANEY: This is a case of a 57 year old married American merchant, terminating fatally four months after first admission.

Readmitted 12/5/39

Died 12/29/39

Chief Complaint: (1) Loss of vision, right eye.

(2) Pain in back of head on stooping	} 6 weeks duration
(3) Dyspnea on exertion	
(4) Fatigue	

Past Personal History: Essentially negative except for:

(1) Usual diseases of childhood

(2) Acute bronchitis 3 years ago

(3) Slight bilateral deafness relieved by

a. adenoidectomy

b. nose drops

(4) Moderate Hypertension

(5) Slight refractive error starting 15 years ago

(6) Lack of usual "pep" for past year

(7) Employed in hardware store using turpentine, arsenical preparations, and in winter removed paint with "fingerwett," an alcohol-wax-benzol derivative

History of Present Illness: (1) While working at summer camp six weeks prior to admission, tree fell striking patient on right shoulder. Though jarred considerably, he did not lose consciousness and continued to work.

(2) Two days later noticed blurring of vision and the following morning awoke totally blind in right eye. No pain.

(3) Oculist reported

a. Vision — right eye 1/200 — optic neuritis

left eye 20/100 — beginning optic neuritis.

b. Suggested 3 possible causes:

1. endogenous infection
2. intracranial pressure

} most probable

3. pressure on nerve from internal carotid artery as it passes over nerve.

4. X-rays of shoulder girdle, cervical, thoracic and lumbar

spines were negative. At this time patient could distinguish light in right eye. Neurological exam was negative. Right pupil was slightly larger than left but both reacted to light and accommodation. Blood smear showed considerable abnormality. Hospitalization advised for study.

* Presented at the Clinico-Pathological Conference, Maine Medical Association Annual Session, Rangeley Lakes, Maine, June 24, 1940.

Physical Examination: (1) Well-developed, well-nourished, white, male
(2) Color fairly good
(3) Head and neck negative except for tender spot over outer third of right clavicle
(4) Mouth
 a. edentulous
 b. small lesion 1 cm. in diameter in right sulcus opposite where first molar should have been in lower jaw
(5) Chest negative except for slight lag of left chest
(6) Heart normal. no murmurs, not enlarged. Blood Pressure 150/100
(7) Abdomen negative, no tender areas or masses. Liver and spleen not enlarged. No venous dilatation
(8) Glands — none enlarged
(9) G. I. and G. U. tracts normal
(10) Neurological normal
Temperature 99, pulse 90, respirations 20

**Laboratory Data:*

	1st Adm.				Disch.	O. P.	2nd Adm.		Died
Dates	9/14/39	9/20/39	9/21/39	9/22/39	10/2/39	10/13/39	10/31/39	11/12/39	12/29/39
Hemoglobin	36	48	48	54	72	72	48	83	92
R. B. C.	1.72	2.15	2.25	2.53	3.84	4.15	2.79	3.59	4.69
W. B. C.	1,500	400	850	1,400	2,100	2,600	2,300	2,700	2,200
Neutrophiles	18			3	2				4
Early Myelocytes								3	
Small Lymphs.	76		100	89	80	84	+	24	56
Lymphoblasts							+		24
Large Lymphs.	4				6	16		19	4
Plasma Cells									3
Large Mononuclears								1	
Monoblasts									4
Eosinophiles	2			2	2			1	1
Reticulocytes	.6		1	.5	.1				
Platelets	285,000			81,600	173,430				Rare
Monocytes				1	8				

* The laboratory data arranged in tabular form represents the general trend of the blood picture during the four months. Not all historical examinations are included.

Additional Laboratory Data: On admission Icteric Index was 4, Van den Berg 0.3 mg.%. Urine negative, Sp. Gr. 1.010. Bence Jones Protein none. Urobilinogen + to +++. Gastric analysis - free HC1 up to 100. Stools negative for occult blood. Blood Wassermann and Kahn negative. X-ray of femora not remarkable.

Progress Notes: First admission—September 14, 1939.

(1) Liver extract, 3 c.c. (2.5 U Per c.c.) daily for 5 days with a reticulocyte response

from 0.6% to 0.8%, and without other demonstrable change in blood picture.

(2) On the sixth hospital day (Sept. 20th) was given first transfusion, 250 c.c. of citrated blood—see blood findings on chart.

(3) On seventh day (Sept. 21st)
Liver extract, 3 c.c.
Pentonucleotide 5 c.c.
Lederle's Vitamin B. complex
(chill with elevation of temperature to 102, pulse 120)
Armour's Yellow Bone and Red Bone Marrow p.o.

Transfusion, 300 c.c. citrated blood, chill and elevation of temperature to 104; see blood findings on chart.

(4) On the eighth day (Sept. 22nd) treatment continued and the third transfusion of 400 c.c. of citrated blood given—see blood findings on chart.

(5) He was discharged October 2, 1939. Lesion in the mouth was healing slowly, temperature, pulse and respirations normal; see blood findings on chart.

Through the month of October patient was quite well. Mouth lesion was healed.

Admitted the second time on October 31, 1939, because of a bronchitis and sinusitis, and a temperature of 101°. No change in vision. At this time there was a small lump in the submental region. No other glands or tumors palpated; see blood findings on chart.

Given three transfusions of 500 c.c. of citrated blood. On discharge, November 12, 1939, node in submental region remained. Normal temperature, pulse and respirations. See blood findings on chart.

At the end of November he developed a second lesion in the mouth along with a septic temperature and a tumor anterior to the left auricle. Was readmitted on December 5, 1939. Blasts appeared in greater numbers up to 50%. He was given eight transfusions. Four days before death there appeared small purpuric spots over the chest, axillary regions and abdomen.

Blood platelets two days before death were down to 42,000. Profuse gastro-intestinal and genito-urinary hemorrhages followed and the patient died on December 29, 1939. See chart for blood findings.

Final Diagnosis:

Aplastic Anemia

DR. T. E. HARDY of Waterville:

The important fact in this case is that we are dealing with a rather sudden loss of vision two days following an injury to the right shoulder girdle, in a man of 57, without clinical evidence of increased intracranial pressure, circulatory failure, or impending uremia.

Physical examination reveals tenderness over the outer portion of the right clavicle, a suggestion of a lag of the left chest, and definite fundus changes.

X-rays were taken of his shoulder girdle and spine but we do not know what they revealed.

Undoubtedly in view of the apparent well being of this patient the blood findings must have been a surprise. No such extensive blood changes could have been suspected clinically.

The fact that the platelets were decreased from the beginning is very suggestive of serious bone marrow disease. Dameshek has once stated that the measure of bone marrow activity may be made from a consideration of four factors: (1) the white blood cell count, (2) the percentage of polymorphonuclear leukocytes, (3) the reticulocyte count, and (4) the platelet count. Consistently throughout the course of this man's illness these factors were generally lowered, hence depression of bone marrow activity predominates our picture. The combination of anemia, leukopenia and thrombocytopenia may be caused by aplastic anemia, lymphosarcoma, metastatic carcinoma, leukosarcoma, leukemia, or lymphoma.

Clinically he improved for a month. There was a mouth lesion that healed, when that appeared we do not know. Then he developed a respiratory tract infection, following which he ran a septic temperature. He then developed a submental node, at which time there was no mouth lesion, later ulcerations of the buccal mucous membrane developed, petechiae, hemorrhages and death.

The terminal septic course, the lesions of the buccal mucous membrane, and the white blood count with, at times, complete absence of granulocytes suggests agranulocytosis but

Differential Diagnoses:

Aplastic Anemia

Pernicious Anemia

Thrombocytopenia

Aleukemic Leukemia

Purpura Hemorrhagica

Monocytic Leukemia

Osteosclerotic Anemia

the presence of petachiae, gross hemorrhage and the profound anemia makes such a diagnosis less likely.

The essentially negative urine, the negative stool, the gastric analysis which satisfactorily rules out pernicious anemia, these together with a normal icteric index and Van den Berg render it safe to conclude that we are dealing with some defect in blood elaboration rather than blood loss or increased blood destruction.

The earlier studies, particularly in view of his occupational contacts with chemicals makes a diagnosis of aplastic anemia tenable. However, the subsequent appearance of immature cells, gradually increasing to 50% at the time of death must carry some contrary significance.

It has been noted that among the conditions or disease states which have been associated with the onset of leukemia is mechanical trauma, particularly to bones. Over 50% of all leukemias show fundus involvement and this may be the presenting symptom, although frequently mouth lesions are first noted.

Terminal Diagnosis: Acute Aleukemic Leukemia.

DR. WILLIAM B. DAMESHEK of Boston:

In these hematological problems of various types, including leukemia or aplastic anemia, exposure to benzol products or other chemicals are always worth serious consideration as etiological factors. Benzol or benzol derivatives to which this patient has been exposed over a period of years may cause a lack of growth in the marrow which is demonstrable by anemia, leukemia and the reduction in platelets. This chemical may effect certain portions of the marrow which may depress the white cells of the bone marrow. Others such as sulphanilamide may give rise to agranulocytosis; still others may cause a depression of the platelets. I am beginning to see more and more cases of acute leukemia which are apparently initiated by various chemicals, particularly in the benzol group. The patient had used a good amount of paint remover. We must keep in mind that this patient used a good amount of paint remover which may have an etiological bearing.

This man had been ill for one year and had been losing his "pep" over that period although he kept on working. Two days following an injury to his head and shoulder his vision became diminished and subsequent loss of vision in one eye. His loss of vision may, therefore, be attributed to a subdural hematoma of involvement of the occipital lobe precipitated by the injury but having roots in the underlying blood dyscrasia. The development of his anemia has been well presented by Dr. Hardy. At first he had no normal cells in his blood and in the presence of anemia, leukemia and thrombocytopenia one must seriously consider aplastic anemia due to a chemical or to bone marrow invasion by malignant disease. He certainly had all the features of an aplastic anemia and did not respond to the various medications; so I think, therefore, it is fair to assume that he had aplastic anemia.

To make a definite diagnosis a bone marrow biopsy was recommended. If the bone marrow is full and contains a large number of leukemia malignant cells we can usually make a diagnosis from the simple smears. If the bone marrow is not full, is fatty and fibrotic we have to resort to a sternal biopsy. His mouth lesions were probably due to infection as is not uncommon in cases of leukopenia. Terminally he showed a picture characteristic of leukemia of lymphatic or monocytic type.

Diagnosis: Aplastic Anemia.

Terminal Aleukemic Leukemia.

DR. JULIUS GOTTLIEB of Lewiston:

Gross postmortem findings: severe anemia; hyperplasia of vertebral and femoral bone marrow; moderate splenomegaly; purpura involving approximately one-third of skin surface, subcutaneous tissues, submucosa of the mouth and mucosa of the stomach with frank hemorrhage into the stomach, pericardium, lungs and ureters. There was extensive subperitoneal hemorrhages which for the most part were confluent embracing approximately one-half of the abdominal and pelvic surfaces. Benign nephrosclerosis and moderate left ventricular hypertrophy. Bilateral Fibrinous Pleuritis. Chronic Cholecystitis, cholelithiasis, focal cirrhosis and moderate icterus.

Discussion: The bone marrow findings were exactly contrary to which I had expected having had the opportunity to study the patient during his first month of illness. I had enthusiastically concurred with the various hematologists on a diagnosis of aplastic anemia, although the terminal clinical and blood pictures cast considerable doubt on the diagnosis.

In aplastic anemia the bone marrow shows a high degree of hypoplasia or even total aplasia in extreme cases. The bone marrow is yellowish or white and extremely fatty. This bone marrow picture holds true in aplastic anemia, even in childhood during the stage wherein the bone marrow is an extremely active organ. Bone marrow in aplastic anemia is usually of a fatty fibrous nature harboring only scattered islands of erythropoiesis. In this case, however, the bone marrow was hyperplastic. It was dense, lustrous, usually reddish with foci of grayish islets. These findings together with splenomegally, ulcerative stomatitis, together with the terminal blood picture warranted a diagnosis of aleukemic leukemia, and ruled out aplastic anemia.

Histological sections appeared to confirm the diagnosis of leukemia;—the exact type cell, however, remained in doubt.

Anatomical Diagnosis: Aleukemic Lymphocytic Leukemia.

DR. H. E. MACMAHON of Boston:

In dealing with a hematological problem one studies the bone marrow, spleen, liver, lymphnodes, kidneys and adrenals particularly; and I am grateful for having had an opportunity to study sections from these organs. The bone marrow from the sternum, ribs, vertebrae and femur showed a uniform picture. There is a sea of cells of a very primitive type. In no situation were red cells being formed. There were no polymorpholeukocytes with the exception of the eosinophilic cell that I could identify. Rare giant cells were seen here and there. One could see many mitotic figures and cells undergoing both degenerative and regenerative changes. We were, therefore, dealing with a growth involving the bone marrow. The lymphnodes were small and insignificant. The splenic lymphoid tissue was inconspicuous. There was an active and diffuse hyperplasia of the red

pulp. In the liver one could see a number of very primitive cells which were not lymphocytes nor myeloblasts. In certain parts of the liver there was a destructive process and these cells were growing in tumor like fashion building up their own reticulum. In the portal areas these cells were suggestive of tumor growth. In the kidney there were leukemic cells. The lymphatics of the kidneys were packed with these cells undergoing rapid proliferation. Similar findings were seen in the adrenals.

CONCLUSION

We felt that we had a picture that one might speak of as a leukemia in the histological sense, yet we had something a little bit different as seen in the tumor like growth of the liver. We had leukemia plus a tumor like growth. If we combine these two histological pictures we arrive at a diagnosis of leukosarcoma. Inasmuch as the presenting cell cannot be designated as a lymphoblast, myelocyte or myeloblast and that this cell is of a primitive nature I can only go as far as designating it as a monotype cell.

Diagnosis: Aleukemic Monocytic Leukosarcoma.

CONTENTS

DR. J. GOTTLIEB of Lewiston:

This case illustrates the complexities and difficulties encountered in hematological dyscrasias. Despite most careful and exhaustive clinical, laboratory and postmortem studies a clear picture of the origin, and mechanism of this patient's illness is still lacking. Basic questions are still challenging and are unanswerable in our present stage of knowledge. Certain it is that his circulating blood mirrored evidence of bone marrow aplasia initially and that of a leukemia terminally. Can we postulate a reversion from aplasia to hyperplasia effecting primarily a stem type cell? Continued hyperplasia leading to hypoplasia is not an uncommon tissue phenomenon. The reverse mechanism, however, engages strained mental acrobatics. Can we accept an initial leukemia with hyperplastic foci of youthful cells growing at the expense of the matured cellular elements? To accept

Continued on page 70

The President's Page

To the Members of the Maine Medical Association:

The mail man brings a great many letters and other pieces of mail to the President's desk. Among them are numerous requests and appeals for contributions and aid to various good causes. Three of them which the post has recently brought to this office have reached, I expect, almost all of the doctors.

The first, which is justly due, belongs in a special class. I refer to the requests for annual dues from the County Secretaries. These remind us all that we must attend to our annual contribution to our State Society; it represents the levy or impost which we all pay to keep the County and State Associations in a solvent position. Already some County Societies have paid 100% on their membership. And the Officers wish to thank and congratulate them. It is a great help to the Treasurer to have the dues in hand at an early date. There are 735 members in the Association; 735 members who must be checked for our Annual Roster which appears in May. And the delinquents, in accordance with our By-Laws, reported to the A. M. A.

The second letter outlined the organization and accomplishments of The Medical and Surgical Supply Committee of America.* A paragraph in the letter says this—"Somewhere in your office you have quantities of supplies sent you by the various manufacturing pharmaceutical houses. These medications plus any instruments and equipment you feel able to donate will be the means of saving human life." Spiritually we are descendants of the Honored British Clinicians, Sydenham, the Hunters, Bright, Lister and others. And in their memory as well as in behalf of the suffering civilians of present day England and Greece may we not make an effort to swell the contributions already flowing overseas to the British Red Cross for distribution.

The third letter is the appeal for support of the Annual Campaign of the "Women's Field Army." They will start their drive in April and the proceeds will be added to the Scannell Fund for care and treatment of deserving cancer patients. Already they have brought courage and help to many sufferers from dreaded cancer. And they plan to continue and expand their work throughout the State.

There are many, many worthy causes which deserve support. We have evidence to prove the generous help of the physicians to many of them. I am writing this letter to remind you to pay your dues and to solicit your support for the two worthy causes mentioned above.

THOMAS A. FOSTER, M. D.,
President, Maine Medical Association.

* Supplies for the British, page 76.

Editorial

Coming Events Cast Their Shadows Before

Indications seem to be that a national health program will be presented to the present Congress and one of the build ups for action will be the alleged deplorable health of the nation as disclosed by the rejection percentage under the Selective Service Act. Couple this with the label of national defense and Congress is sure to lend a willing ear. The question has been asked; why have so many men been rejected, when to the contrary the nation has been asked to believe that the general health of the people is one for a matter of congratulation in many respects. Obviously it will take considerable time to break down the exact causes for rejection by all the medical boards connected with the selection of men for military service but it can be taken for granted that those interested in furthering bureaucratic control will not neglect the opportunity to point with alarm at the alleged conditions disclosed.

A veritable Niagara of words will follow, one can look with confidence for editorials in the lay press asking why this should be together with all the silly chatter emanating from subservient boards and the many and varied investigating groups that clutter the country. To perpetuate their jobs individually and collectively they must produce certain studies which they fondly hope will point to the ways and means of improving the health of the average individual. What these pointers out will fail to recognize and emphasize is that despite all the educational work that has been done and the facilities provided, far too many people are pathetically indifferent to their well being. The chattel mortgages on their cars, radios, electric refrigerators and washing machine can and will be foreclosed unless the requirements are met; why worry about health?

More or less comment has been made concerning the incompetency of the draft board examiners in the World War as disclosed by the number of men who did not stand the rigors of military service and who as results

of incapacities sustained are being taken care of by the Government at an enormous expense. What they fail to recognize is that the examiners at that time were a group of men, some with little or no experience, worked beyond all sensible capacity and without proper time and facilities for more than a cursory examination.

Under the present Selective Service Act conditions are vastly different and what the public and bureaucrats should grasp is that the Selective Service Act is definitely specific in requirements for *unlimited military service* and many of the causes for rejection are not such that prevent many of the registrants from following a useful vocation in civil life. The publicity angle furnished by statistics in the rough will not be neglected by the proponents of compulsory health insurance or any other scheme they hope to foist on the nation; in fact, legislation to that effect is now in the making in some states.

It may be that it was a mistake to employ civilian physicians on the Local Boards and that the job of selecting men should have been done by the various services. This statement is made in view of the fact that 116 men were rejected by the Induction Boards in Maine from 638 passed as fit by local board examiners. Of course the point of view of civilian medical examiners and those of the Army can well be expected to vary but one wonders why a man who can travel all day with snow shoes over a trapping line would suffer from flat feet sufficient to reject. Some of the local boards will show a very large number of rejections for an insufficient number of teeth and an extremely bad condition of those that remain. Naturally the question arises; what can be done about that? There are also several other causes for rejection that can provoke the same enquiry and it can be remarked that Army examiners are most keen in rejecting those they feel "psychologically unfitted" for combat service. Of course as yet we are not at

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*Coming Events Cast Their Shadows Before—
Continued from page 69*

war and the standards of acceptance by the Induction Boards are being kept as high as possible. However, the health of the nation is not as deplorable as the proponents for this, that or the other scheme will try to make out and it may be that continued effort and co-operation will result in a more uniform interpretation of physical standards and fitness by Local Examiners and Induction Boards. So far it is reported that Maine has the lowest percentage of rejections and even the justice of some of these seems to be open to question.

Julius Gottlieb—Continued from page 67

this hypothesis one is confronted with the early failure of delivery of these cells into the peripheral blood stream. This hypothesis raises the more fundamental question pertaining to the normal absence of immature bone marrow cells in health and their appearance in the peripheral blood in certain diseases. The problem of two distinct type cells as opposed to metaplastic possibilities cannot be brushed aside lightly and further complicates the diagnosis whatever may be the relationship of the assumed early aplasia to the encountered postmortem hyperplasia.

Sven Gundersen—Continued from page 55

extra sugar in his pocket in case of insulin reactions. He will be equipped to take some extra carbohydrate every two hours when he is driving an automobile. He will avoid social embarrassments by informing his host about his diabetic condition and the need for his having meals at definite times.

Two contrary laws seem to be wrestling with each other nowadays; the one a law of blood and of death ever imagining new means of destruction and forcing nations to be constantly ready for the battlefield—the other, a law of peace, work and health, ever evolving new means of delivering man from the scourges which beset him. The one seeks violent conquests; the other, the relief of humanity. The latter places one human life above any victory; while the former would sacrifice hundreds of thousands of lives to the ambition of one. The law of which we are the instruments seeks, even in the midst of carnage, to cure the sanguinary ills of the law of war; the treatment inspired by our anti-septic methods may preserve thousands of soldiers. Which of these two laws will ultimately prevail, God alone knows. But we may assert that science will have tried, by obeying the law of humanity, to extend the frontiers of life.—LOUIS PASTEUR.

The Platform of the American Medical Association

The American Medical Association advocates:

1. The establishment of an agency of the federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need, for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical

services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

Necrologies

Timothy J. O'Sullivan, M. D., 1886-1941

Doctor Timothy J. O'Sullivan died suddenly at his home, 10 Pine Street, Portland, Maine, on February 16, 1941, of coronary occlusion. He was born in Charlestown, Massachusetts, December 29, 1886. He received his early education in the parochial schools of Biddeford, Maine, to which city his parents moved when he was six years of age. He obtained his A. B. degree at St. Mary's College at Van Buren, Maine, in 1908. He also attended Holy Cross College and was graduated from Boston University School of Medicine in 1914. After a year as interne at Trull Hospital he opened an office for general practice in Portland in 1915. He continued to practice in Portland until the World War, when he enlisted in the Navy. After his service in the Navy he went to the University of Pennsylvania Graduate Medical School where he prepared for his specialized work in diseases of the nose, throat, and ear and became one of the foremost specialists in his field in this State.

He was a member of the American Academy of Ophthalmology and Otolaryngology, Fellow of the American College of Surgeons, the American Medical Association, in addition to memberships held in the Cumberland County Medical Society, the Portland Medical Club, and the Maine Medical Association, before which he frequently contributed medical papers.

He was a member of the Staff of the Maine General Hospital, the Maine Eye and Ear Infirmary, and the consulting staff of the Queen's Hospital of Portland and the Webber Hospital and Trull Hospital at Biddeford.

Portland and the State of Maine has lost a good

citizen and a loyal friend. The physicians knew him as one of the most accurate of diagnosticians in his field and admired his sound judgment and notable surgical skill and above all, his friendly, cheerful, lovable personality.

His patients will miss his sound advice, and the poor will miss his generous care.

The sympathy of his colleagues goes out to his wife, Mrs. Kathryn D. O'Sullivan, a daughter, Mrs. Walter Merrick, and a son Eugene O'Sullivan.

He is survived also by a brother, James of Biddeford, and several nephews and nieces at Biddeford and Saco, including Doctor William F. Mahaney and Hillary Mahaney, Attorney, both of Saco.

FRANKLIN A. FERGUSON.

Allen Edward Schriver, M. D.

Doctor Allen Edward Schriver, 71, of Brewer, died at his home Friday, January 24th, after a long illness. Two sons, Stanley D. Schriver of Brooklyn, New York, and Lester G. Schriver, of Brewer, survive.

Doctor Schriver, well known among the medical profession throughout the State, had practiced in Bridgewater and Milo before establishing himself in Brewer. He was a member of the Maine Medical Association and the Penobscot County Medical Association. He had served Brewer as health officer for several years.

His non-professional affiliations were with the Milo Lodge, F. and A. M., and Wildey Lodge, I. O. O. F. He was a member of Calvary Baptist Church.

Funeral services were held from the Calvary Baptist Church, Sunday, January 26th, at 2 o'clock.

County News and Notes

100% Paid-Up Membership for 1941

Piscataquis County Medical Society, N. H. Nickerson, M. D., Greenville, Secretary.

For the fourth consecutive year credit goes to the members of the Piscataquis County Medical Society for being first with 100% payment of dues.

Lincoln-Sagadahoc County Medical Society, Jacob Smith, M. D., Bath, Secretary.

To the members of this newly organized group goes credit for being second with 100% payment of 1941 dues.

Franklin County Medical Society, Lorrimer M. Schmidt, M. R., Strong, Secretary.

Cumberland

The 157th meeting of the Cumberland County Medical Society was held at the Eastland Hotel on January 31, 1941, and presided over by Dr. George O. Cummings, President. Preceding the meeting there was a clinic held at the Maine General Hospital, where the following cases were presented.

1. Tumor of the Testicle—Dr. Roderick Huntress, Urol. Service.
2. Cystic Hygroma of the Chest Wall—Dr. Wilbur Leighton, Surg. Service.
3. A Case of Dry Bronchiectasis—Dr. Edward Greco, Medical Service.
4. Follow-up on a Case of Carcinoma of the Breast with Pre-Operative Radiation—Dr. E. E. O'Donnell, Surg. Service.
5. Paget's Disease of the Breast—Dr. Carl Robinson, Surg. Service.
6. A Reconstruction Problem—Dr. Milton S. Thompson and Dr. E. E. O'Donnell, Surg. Service.
7. Brain Abscess—Dr. Henry P. Johnson, Ear, Nose, Throat Service.
8. Theca Cell Tumor of the Ovary—Dr. Theodore Bramhall, Gynecol. Service.

The Clinic was followed by a moving picture, "Birth Control."

There were 50 physicians present at the clinic.

The dinner was held at the Eastland Hotel and was a joint meeting with the Maine Pharmaceutical Association.

There were 150 physicians and druggists present. The meeting was addressed by Mr. Harry S.

Noel of Indianapolis. Subject: "Relations Between Physician and Pharmacist."

Dr. E. E. O'Donnell was elected to fill the term of Dr. Donald Daniels as Secretary-Treasurer. Dr. Daniels having resigned as Secretary at the last meeting as he had been called to active service in the U. S. Navy.

The following physicians were elected to membership:

Dr. Paul Davis, Bridgton, Maine.

Dr. Victor L. Szanton, Bridgton, Maine.

Dr. Reynold A. E. Ulpts, Portland, Maine.

Dr. Lawrence Holt, Portland, Maine.

Dr. Kenneth Smith, Portland, Maine.

Appointed to serve on the Cumberland County Cancer Committee are the following:

Dr. E. E. O'Donnell, Chairman; Dr. Jack Spencer, Dr. William Needleman, Dr. F. W. Hanlon, Dr. Richardson, Brunswick, Maine.

Respectfully submitted,

E. E. O'DONNELL, M. D.,
Secretary.

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, February 4, 1941, at 8.15 P. M. In the absence of the President, the Vice-President, Dr. E. A. Greco, presided. There were 38 members and two guests present.

Dr. Thomas A. Foster reported for the Committee on Outside Relations and called upon Dr. R. S. Hawkes to tell of the Survey being conducted by the Council of Social Agencies.

Dr. Thomas J. Burrage of the Liaison Committee reported that monthly notices of the meetings were to be mailed to the doctors stationed at the local forts.

The Scientific Program consisted of a *Symposium on Gall Bladder Disease*, led by Dr. Jack Spencer.

Dr. R. S. Hawkes spoke on *History and Symptoms*.

Dr. J. M. Parker on *Surgical Aspects*.

Dr. T. C. Bramhall on *Acute Pancreatitis Associated with Gall Bladder Pathology*.

Dr. Jack Spencer on *Oral Cholecystographic Findings; and Analysis of 100 Operative Cases*.

Dr. J. E. Porter on *Pathological Aspects*.

Members participating in the discussion were Drs. G. C. Poore, I. M. Webber, E. E. O'Donnell, W. D. Anderson, L. T. Thaxter, G. E. C. Logan and Mortimer Warren.

ALICE WHITTIER, Secretary.

Have You Paid Your 1941 State and County Dues?

To insure being in the annual roster, which is to be printed in the May issue of the JOURNAL, members must be reported in good standing by their County's Secretary on or before April 1st.

Kennebec

A meeting of the Kennebec County Medical Association was held at the Sisters Hospital, Waterville, Maine, Thursday, February 20, 1941.

Clinical Session at 5 P. M., which was presided over by I. E. McLaughlin, M. D., President of the Association:

1. Multiple myeloma, M. F. Lubell, M. D.
2. Erysipelas, B. O. Goodrich, M. D.
3. Primary Carcinoma of the Common Duct, E. H. Risley, M. D.
4. Septicemia, W. L. Gousse, M. D.
5. Carcinomatosis, Armand Guite, M. D.
6. Hypertrophic Appendicitis, Ovid Pomerleau, M. D.
7. Polycythemia Vera, A. H. McQuillan, M. D., and J. O. Piper, M. D.
8. Detached Retina, H. F. Hill, M. D.
9. Safety Pin in Esophagus, F. T. Hill, M. D.
10. Dermoid Cyst of Lung, J. P. Goodrich, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

The following were admitted to membership: William Wallace Hardman, M. D., Togus; Luverne Harris, M. D., Richmond; and Helen Curtis Provost, M. D., Augusta.

The application of Everett F. Conlogue, M. D., Fairfield, Maine, was received and referred to the Council.

Edward H. Risley, M. D., of Waterville, spoke briefly relative to the cancer work in the State, and made a motion that a special committee composed of three members be appointed by the president of the County Association to coöperate with the Cancer Commission of the Maine Medical Association. This order was carried and the following members were appointed:

Moses F. Lubell, M. D., Waterville; M. T. Shelton, M. D., Augusta; and Frank Bull, M. D., Gardiner.

The speaker of the evening was Samuel N. Vose, M. D., Assistant Professor of Urology, Boston University, whose subject was *Recent Advances in Urology*. Dr. Vose gave a very instructive and interesting talk which was followed by a general discussion.

There were 53 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Penobscot

The monthly meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday, February 18th, beginning with dinner at 6.30.

E. P. Goodrich, M. D., President of the Associa-

tion, attended for the first time since a serious illness.

Present, as guest, was Thomas A. Foster, M. D., President of the Maine Medical Association. Doctor Foster spoke on affairs of the Association and reminded the doctors of the State meeting in June at York Harbor. State Secretary Frederick R. Carter, M. D., was also present and spoke briefly.

Elected to membership were: Arthur P. Stebbins, M. D., and Chester W. Malmstead, M. D., of Bangor. Transferred from Kennebec County Medical Association, Adelbert B. Allen, M. D., of Corinna.

Speaker was William E. Brown, M. D., Clinical Professor of Surgery at Tufts Medical School. Subject: *Diagnosis and Treatment of Spreading Infections of the Hand*. A motion picture beautifully done in color, illustrated some of the technical procedures.

There were 51 present.

FORREST B. AMES, M. D.,
Secretary.

Piscataquis

A meeting of the Piscataquis County Medical Association was held in Legion Hall, Dover-Foxcroft, Maine, February 20, 1941, at 2.00 P. M.

George Carlson Howard, M. D., was elected to membership.

Lieutenant Commander Thomas H. Peterson of the Chelsea Naval Hospital, formerly instructor in Orthopedic Surgery at Tufts Medical School and assistant in surgery at Harvard Medical School, spoke on *Fractures Near the Shoulder*.

Our Association now has a membership of 18. All but three were present, which gives us an attendance of 83 $\frac{1}{3}$ %.

We were glad to welcome six guests.

N. H. NICKERSON, Secretary.

New Member

Cumberland

Paul Vincent Davis, M. D., Bridgton, Maine.
C. Lawrence Holt, M. D., Portland, Maine.
Kenneth E. Smith, M. D., Portland, Maine.
Victor L. Szanton, M. D., Bridgton, Maine.
Reynold A. E. Ulpts, M. D., Portland, Maine.

Kennebec

William Wallace Hardman, M. D., Togus, Maine.
Luverne Harris, M. D., Richmond, Maine.
Helen Curtis Provost, M. D., Augusta, Maine.

Penobscot

Chester W. Malmstead, M. D., Bangor, Maine.
Arthur P. Stebbins, M. D., Bangor, Maine.
Adelbert B. Allen, M. D., Corinna, Maine. (By transfer from the Kennebec County Medical Association.)

Piscataquis

George Carlson Howard, M. D., Guilford, Maine.

York

John T. Guy, M. D., Eliot, Maine.

Coming Meetings*National Medical Societies***American Medical Association**

Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

Annual Meeting—Cleveland, June 2-6, 1941.

*State Medical Societies***Connecticut State Medical Society**

Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Bridgeport, May 21-22, 1941.

Maine Medical Association

Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—York Harbor, June 22-24, 1941.

Massachusetts Medical Society

Robert N. Nye, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1941.

New Hampshire Medical Society

C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 13-14, 1941.

Rhode Island Medical Society

Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Providence, May 28-29, 1941.

Vermont State Medical Society

Benjamin F. Cook, M. D., 154 Bellevue Avenue, Rutland, Secretary.

Annual Meeting—Burlington, October, 1941.

*County Medical Societies**Cumberland***Cumberland County Medical Association**

Eugene E. O'Donnell, M. D., Portland, Secretary.

Friday, March 28, 1941, 7.00 P. M.

The Eastland Hotel, Portland, Maine.

Speaker, Dr. Champ Lyons.

Subject, *Chemotherapy*.

Friday, April 25, 1941, 7.00 P. M.

The Eastland Hotel, Portland, Maine.

Speaker, Dr. Edward B. Benedict.

Subject, *Gastrosocopy*.

Notices*State of Maine**Board of Registration of Medicine*

Adam P. Leighton, M. D., Portland, Secretary.
Physicians licensed in Maine, July 3, 1940:

Through Examination

Alton David Blake, Jr., M. D., Waterville, Maine.

Aaron Bobrow, M. D., Hartford, Connecticut.

William E. Browne, M. D., Boston, Massachusetts.

Charles Robert Geer, M. D., Portland, Maine.

Donald Francis Larking, M. D., Waterville, Maine.

Louis Charles LeSieur, M. D., Biddeford, Maine.

Harry Mosher Lowd, Jr., M. D., Swampscott, Massachusetts.

Alexander Denholme Milligan, M. D., Hartford, Connecticut.

Leonard Gennaro Miragliuolo, M. D., Providence, Rhode Island.

John Franklin Reynolds, M. D., Waterville, Maine.

Through Reciprocity

Harvey Franklin Doe, M. D., Trenton, New Jersey.

Charles Lawrence Holt, M. D., Portland, Maine.

Edward F. Rohmer, M. D., Astoria, Long Island.

Deering Greeley Smith, M. D., Nashua, New Hampshire.

Victor Leo Szanton, M. D., Deal Island, Maryland.

Physicians licensed in Maine, November 13, 1940:

Thomas J. Fritchey, M. D., Harrisburg, Pennsylvania.

Eugene Gordon Gormley, M. D., Houlton, Maine.

Karl V. Larson, M. D., Eastern Maine General Hospital, Bangor, Maine.

Walter Domenico Mazzacane, M. D., New Haven, Connecticut.

John Dollar Prior, M. D., Hartford, Connecticut.

Ray Albert Proctor, M. D., Boothbay Harbor, Maine.

Abraham E. Rosen, M. D., Bangor, Maine.
Mason Trowbridge, Jr., M. D., Upper Montclair,
New Jersey.

Cecil H. Turner, M. D., Edmundston, New Brunswick.

Through Reciprocity

Robert A. Frost, M. D., Lewiston, Maine.
Donald Macomber, M. D., North Quincy, Massachusetts.

Ralf Martin, M. D., South Freeport, Maine.
Arthur P. Stebbins, Bangor State Hospital, Bangor, Maine.

Tufts College Medical School Alumni Association

The 47th Anniversary of the Tufts College Medical School Alumni Association will be celebrated at its Annual Dinner on Wednesday evening, March 26th, at 7.00 P. M., at the Hotel Somerset, Boston. Dr. Alonzo K. Paine, President, Tufts College Medical School Alumni Association.

Correction

Since I was responsible for the statistical information contained in the President's Page in the February, 1941, issue of the JOURNAL, I wish to state the actual figures for cancer death rate in Maine as received from the Director of the Division of Vital Statistics. In the year 1939 there were 1,313 deaths; death rate per 100,000 being 155.7.

MORTIMER WARREN, M. D.

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.
2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.
3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.
4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.
5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.
6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.
7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

The Commonwealth Fund

The Commonwealth Fund has made available twenty-eight post graduate Fellowships for the coming year, to be divided among practicing physicians of Maine, New Hampshire and Vermont. Preference will be given to men who have been out of medical school at least five years, who are not more than forty-five years of age and who are engaged in general practice. The fund makes available a stipend of \$250 for each of the months the individual is on Fellowship plus tuition and travel. Applications may be obtained directly from the Commonwealth Fund, 41 East 57th St., New York City, or from the office of the State Secretary. The Director, Dr. Scamman, will be in Maine late in March to interview applicants for these Fellowships so it is suggested that physicians interested make applications as soon as possible.

From the Committee on Graduate Education

Realizing that it is difficult to provide physicians opportunities of keeping abreast of the latest developments the Committee on Graduate Education announces that arrangements have been made for the following teaching clinics in Surgery.

1. Diabetic Rounds starting every Monday, at 8.00, at the New England Deaconess Hospital, on the second floor with the medical and surgical phases of this important disease emphasized by Dr. Joslin, Dr. McKittrick and associates.

2. Head Injuries—Donald Munro, M. D., Chief of Neurosurgery: Boston City Hospital every Tuesday morning.

3. General Surgery (operative clinics)—Howard M. Clute, M. D., Massachusetts Memorial Hospital every Wednesday morning.

4. At the Massachusetts General Hospital every Thursday morning at 8.00, is a Peripheral Vascular clinic; following at 9.00, a surgical clinic; a medical clinic at 11.00 and a clinico-pathological conference at 12.00.

5. Traumatic Surgery—Gordon M. Morrison, M. D., Boston City Hospital every Friday morning.

All the clinics mentioned are held daily with the exception of holidays.

Members of the Maine Medical Association who are interested in these subjects will be welcome at these clinics on the designated days throughout the year and while no formal applications are necessary it is suggested that telegrams or letters be sent to the men in charge in order that the exact hour be known and that they may be on the lookout for those attending. Telegrams or letters can be sent to Dr. Joslin or Dr. McKittrick at the New England Deaconess Hospital, (No. 1); Dr. Munro at the Boston City Hospital, (No. 2); Dr. Clute at 171 Bay State Road, (No. 3); the Massachusetts General Hospital, (No. 4); and Dr. Morrison at 520 Commonwealth Avenue, (No. 5).

Tumor Clinics

Bangor: *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*

Lewiston: *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland: *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*

Waterville: *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bing-

ham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

Supplies for the British

Maine is among the first states from which instruments for the British have been received.

It turns out that the offer of the Railway Express does not cover transportation of the donations to New York. Where they have pickup service it will take them to any collection point in the same town.

Further supplies should be sent to the Medical and Surgical Committee, 420 Lexington Avenue, New York City.

Local Committee

Dr. S. Judd Beach, Portland,
Dr. John O. Piper, Waterville,
Dr. Frederick T. Hill, Waterville.

Book Reviews

"The Doctor and the Difficult Child"

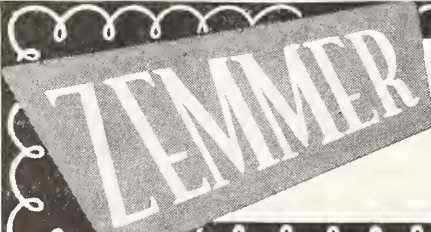
By: William Moodie, M. D., F. R. C. P., D. P. M.,
Medical Director, London Child Guidance
Clinic and Training Centre.

Published by The Commonwealth Fund, New
York, 1940. Price, \$1.50.

"The Doctor and the Difficult Child" is not a scientific treatise but a small book of over two hundred pages full of much useful and important information for the general practitioner, the pediatrician, and the intelligent layman. It is written in simple, unaffected language free from profes-

sional jargon and theoretical generalizations. The author, an English psychiatrist with long experience in treating children, displays much sympathetic insight into the points of view of the child as well as the parent and understands their anxieties, problems, conflicts and needs.

Since the children with behavior difficulties range from normal ones who have experienced some strong disturbing influence in their environments to those who are frankly abnormal or psychotic and who behave and think abnormally, and since all of these children are brought to the physician chiefly for the purpose of having the symp-



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toms of the disturbance removed, it is necessary that the physician be reasonably well informed of the chief causative factors and their elimination. With surprising clarity and comprehensive effectiveness Dr. Moodie solves most difficult problems happily. Healthy, happy, normal attachment within the family is freely permitted. So-called scientific criticism and blame-placing is discouraged. Reasons for feelings of insecurity and anxiety are sought out and removed where possible. Normal self-development to meet life's difficulties successfully is taught understandingly.

"Clinical Pellagra"

By: Seale Harris, M. D., Professor Emeritus of Medicine, University of Alabama, Birmingham, Alabama; Assisted by Seale Harris, Jr., M. D., formerly Assistant Professor of Medicine, Vanderbilt University, Birmingham, Alabama; with Foreword by E. V. McCallum, Ph. D., Sc. D., LL. D., Professor of Biochemistry, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland.

Illustrated.

Published by The C. V. Mosby Co., St. Louis, 1941.
Price, \$7.00.

Clinical Pellagra has been prepared by a close student of pellagrous patients during the generation just passed. He chose to treat this disease complex scientifically as well as philosophically and in such fashion that the theorist will find much food for more thought, the pragmatic practitioner may learn what has been done in the past and what can be done in the future, the pessimist can find much that will brighten his outlook for the future and the self-confident enthusiast may learn that many a good man felt confident that he was on the right track to the truth about pellagra during the past generations. The author lists forty-eight theories of the origin or cause of pellagra, mentions some others, and elaborates on many of them. He expresses his belief that so far as he can learn from his own experience and that of many others, the last word on pellagra will not have been spoken after many more years of diligent investigation. He suspects that we shall soon discover, as he did, that we are dealing with a very complex problem, the solution of which will require efficient co-operation of several social, economic, etc., agencies with the medical profession if we hope to ever completely eradicate pellagra from this continent. Five thousand bibliographical references help to guide the untiring student in his further research activities.

For the Local Treatment of Acute Anterior **URETHRITIS** (DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE *
Wyeth

A complete technique of treatment and literature will be sent upon request

JOHN WYETH & BROTHER, INCORPORATED, PHILA.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*. (1) An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

I. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

*Silver Picrate, is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

"Electrocardiography in Practice"

By: Ashton Graybiel, M. D., Instructor in Medicine, Courses for Graduates, Harvard Medical School; Research Associate, Fatigue Laboratory, Harvard University; Assistant in Medicine, Massachusetts General Hospital; and Paul D. White, M. D., Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital, in charge of the Cardiac Clinics and Laboratory.

With 272 Illustrations.

Published by W. B. Saunders Company, Philadelphia, 1941. Price, \$6.00.

Electrocardiography is assuming considerable importance. The electrocardiograms collected in this book are the result of the authors' desire to bring together in one volume all the actually useful graphic information that has been accumulated during the years of practical electrocardiographic examination of human heart action. There are 142 illustrations of electrocardiograms which illustrate variations found in normal heart action, several rhythm disorders, and etiologic types of heart disease; 130 additional illustrations of electrocardiograms are added for the practice of interpretation of findings presented with explanatory notes. These electrocardiograms have been carefully selected by the authors for the purpose of illustrating the various forms of cardiac arrhythmias as well as the characteristic findings in the different etiologic types of heart disease. The authors believe that it is a waste of time, in reporting on electrocardiographic examinations, to describe in detail all the details of normal characteristics; they feel that the most satisfactory method is to state the rhythm and the rate and mention the fact that no abnormalities were found if the function is normal, or describe in detail all abnormalities when pathology is present. Since errors in electrocardiographic interpretations are most often made by calling some unusual variation of normal action abnormal, this book will be of great value in the proper evaluation of all readings as they are met with in practice. There is an appendix containing an analytical electrocardiographic index.

"Physical Diagnosis"

By: Ralph H. Major, M. D., Professor of Medicine in the University of Kansas.

Second Edition, 437 Illustrations.

Published by W. B. Saunders Company, Philadelphia, 1940. Price, \$5.00.

This is a considerably improved new edition of a well-liked textbook on Physical Diagnosis. Students always learn better from pictorial demonstrations. Naturally there is no true substitute for the original experience of inspection, percussion, and auscultation as practiced on the person ill from disease. The many excellent illustrations are most illuminative of the pathologic alteration which they are meant to show. The section dealing with the examination of the nervous system has been rearranged and partly rewritten for better understanding.

"Methods of Treatment"

By: Logan Clendening, M. D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; and Edward H. Hashinger, A. B., M. D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; Attending Physician, St. Luke's Hospital, Kansas City, Mo.

With chapters on special subjects by specialists.

Seventh Edition.

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Illustrated.

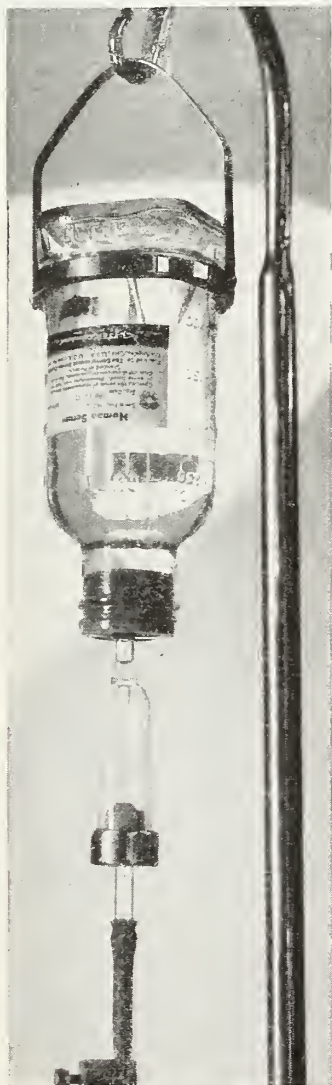
Published by The C. V. Mosby Company, St. Louis, Mo., 1940. Price, \$6.00.

The purpose of this book is to present to the medical profession the fundamental principles of medical jurisprudence as it applies to ophthalmology, to present an analysis of compensation laws, to explain in detail the various steps in the solution of the problem of measuring and of evaluating

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The Journal of the Maine Medical Association

Volume Thirty-two

Portland, Maine, April, 1941

No. 4

*Some of the Problems of Anorectal Surgery**

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Diseases of the anal canal and lower rectum have been neglected by our profession until very recent years. There have been two principal reasons for this: (1) Our medical schools have been backward in instituting courses that have offered any more than the most superficial training in diseases of the lower bowel. This defect, however, is rapidly being overcome. The American Proctological Society, other organizations and various individuals interested in proctology are making every effort to have included in all of our medical schools adequate training in this field. Rectal diseases are so common that a reasonable understanding of them should be a part of the training of every medical school graduate and certainly every general practitioner should understand the basic principles of the diagnosis and treatment of cancer of the rectum, hemorrhoids, anal fissures and fistulas. (2) There is a natural hesitancy on the part of many patients to avoid bringing to the attention of their family physician rectal symptoms which may be the earliest sign of serious disease. The medical profession likewise has been lax in the past in appreciating the early significance of many of these symptoms and too often has avoided adequate rectal ex-

aminations which has resulted often in an unfortunate delay in instituting treatment for these conditions.

Certainly, then, one of our first problems is to disseminate the basic principles of anorectal surgery to the profession at large. The management of the majority of proctologic problems is not difficult if understood and many of the diseases that arise in the anal canal can be as well treated by the adequately trained general practitioner as by the highly trained specialist. The early detection of cancer of the rectum and colon and of premalignant lesions in this region must be left largely in the hands of those practitioners who first see these patients. This problem alone is of paramount importance to us all. During the past ten years the technical progress that has been made in the management of cancer of the colon and rectum has been so marked that at present cancer of the large bowel is regarded as one of the most favorable types of malignancy with which we deal. At present in our experience of all those patients who present themselves to us with rectal or colon malignancy, one in three will be alive and well five years following operation. However, during recent years there has not been a simi-

* Presented at the June, 1940, meeting of the Piscataquis County Medical Society at Guilford, Maine.

lar advance in the earlier detection of this condition and further advances in this direction must be made by those of us who first come in contact with these patients.

EXAMINATION OF THE PATIENT

In the accompanying diagram (Table 1) is shown the symptomatology presented by 100 patients with cancer of the rectum, 100 patients with cancer of the left colon and 100 patients with cancer of the right colon. As

may be observed, these symptoms can be grouped under three main headings: (1) An abnormal stool, usually indicated by the presence of blood. (2) An alteration in bowel function. The textbook picture of an alternating constipation and diarrhea is present, in our experience, in not over 20 per cent of patients with large bowel malignancy. The significant symptom is any alteration in bowel function, whether it is the development of constipation, or diarrhea, or an increasing constipation. (3) Unexplained abdominal

TABLE 1
SYMPTOMS OF CARCINOMA OF THE COLON AND RECTUM
(300 CASES)

	Rectum, per cent	Left colon, per cent	Right colon, per cent	Total, per cent
Blood in stool	86	46	9	46
Altered bowel function	79	82	81	80
Abdominal cramps or pain	7	77	87	57
None	2	2	3	2.3

pain. This is a symptom which has not been properly emphasized in this regard. A tumor within the narrow lumen of the bowel will very early in its development produce the colicky pain of beginning obstruction. These symptoms, therefore, together with the obvious symptoms of rectal pain, protrusion and so forth, make up the indications for thorough investigation of the rectum and colon.

Digital examination of the rectum with the well lubricated, gloved finger should be a part of every general medical examination and must be carried out as the first part of any rectal or colon examination. Rectal examinations must be done gently but thoroughly. When one considers that in our experience 90 per cent of all malignancy in the rectum can be palpated with the examining finger alone, the importance of this simple examination will be appreciated. Patients must not be hurt by digital examination. In the presence of anal fissure, thrombosed hemorrhoids, and infection, great pain may be experienced by examinations of this type. We believe that when digital examination cannot be properly

carried out because of rectal pain, that fact alone is sufficient indication for thorough study of the rectum and colon with the patient under anesthesia if necessary.

The next step in the examination of the patient with rectal disease is the direct visualization of the anal canal, the entire rectum, the rectosigmoid area which so frequently cannot be accurately visualized by X-ray, and the lower sigmoid itself. Very little equipment is necessary and certainly prolonged training or experience is not required to carry out adequate sigmoidoscopic examination in the majority of cases. A cleansing enema should first be given so that an accurate visualization of the entire mucosa may be obtained. The character of the stool, the presence of blood or pus or mucus should be noted. In those patients having diarrhea or with any symptoms suggestive of parasitic disease, careful stool examinations should be done. With the patient in the knee-chest position on an ordinary examining table, sigmoidoscopic examinations can be carried out for a distance of at least 10 inches from the

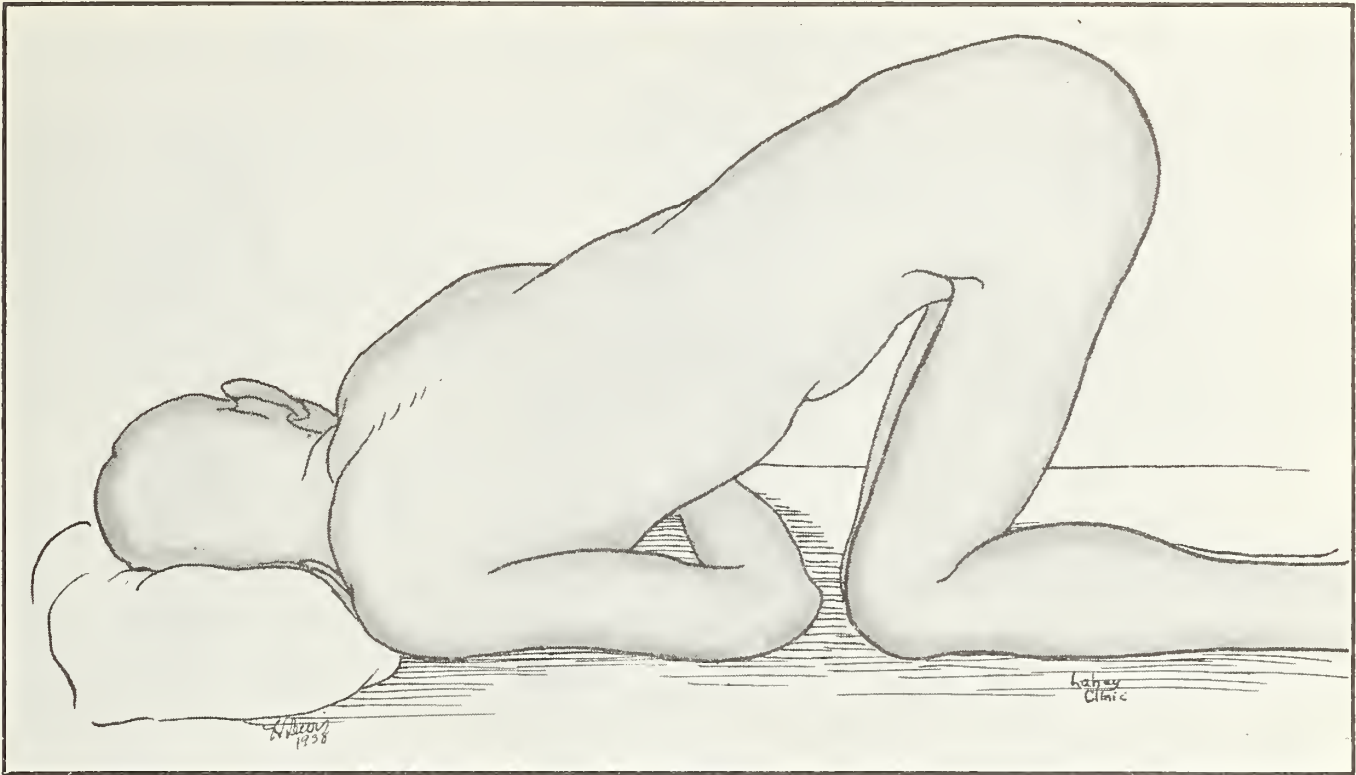


Fig. 1. The knee chest position for sigmoidoscopic examination. Note extension of back.

anal margin in three-fourths of all cases (Fig. 1). When difficulty is experienced in passing the instrument beyond the rectosigmoid angle, nearly every patient can be satis-

factorily examined by placing him in an inverted position and allowing the rectosigmoid angle to straighten out, as shown in Figure 2. This position can be obtained by having

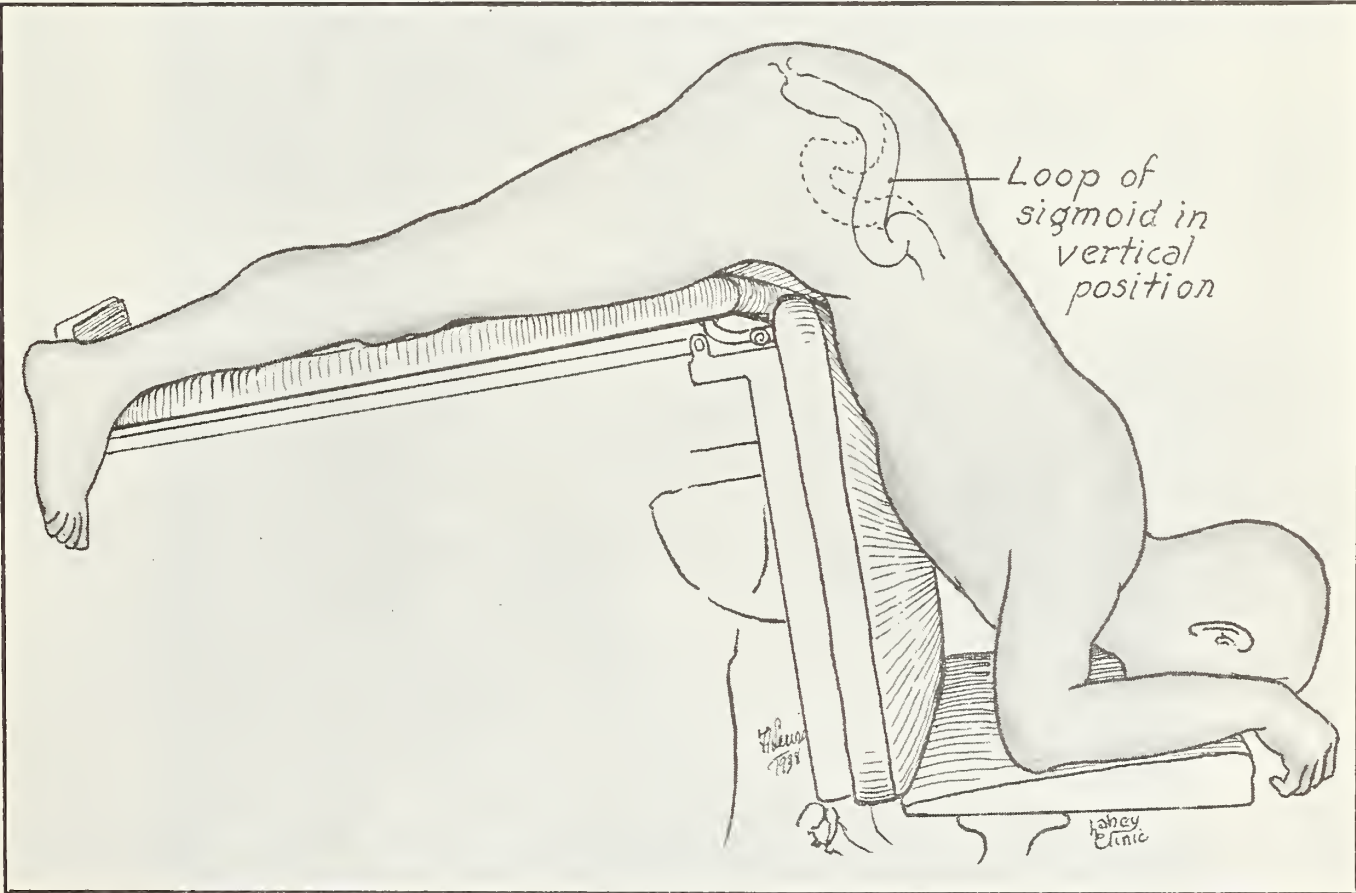


Fig. 2. The inverted position for sigmoidoscopic examination. Note straightening out of rectosigmoid angle.

the patient lean over the edge of an ordinary examining table with his elbows placed on a low platform.

There has been a tendency on the part of many of us in the past to rely too much on barium enema roentgenologic studies alone for the diagnosis of lesions of the colon and rectum. It must be fully appreciated that 70 per cent of all malignant disease in the colon and rectum can be visualized by the ordinary 10-inch sigmoidoscope.

Following adequate sigmoidoscopic examination of the patient, barium enema X-ray studies of the colon may be carried out when indicated. It has become increasingly apparent in recent years that the detection of small organic lesions in the colon, particularly the premalignant polyps, requires something further than the ordinary barium enema roentgenogram. The double contrast air enema has been developed for this purpose (Fig. 3). For roentgenograms of this type, adequate preparation of the colon is essential.

Castor oil by mouth is given the day previous to the examination. Irrigations are given so that the colon is entirely empty of fecal material. A thin mixture of barium is then introduced into the colon, followed by the introduction of air under pressure, so that the entire mucous lining of the colon is outlined by the barium mixture. We have been able by this technic to detect organic lesions in the transverse colon, as small as 0.5 cm. in diameter.

THE ANATOMY OF THE ANAL CANAL

An appreciation of the normal anatomy of the anal canal is essential to an understanding of the pathology in this region.

Figures 4 and 5 outline the normal anatomy of the anal canal. The mucosa, as one visualizes it in the ampulla of the rectum, is smooth, pinkish, and the underlying blood vessels can usually be seen. This pinkish color changes to a bluish tinge overlying the



Fig. 3. Detection of polyp in sigmoid by contrast air enema roentgenogram.

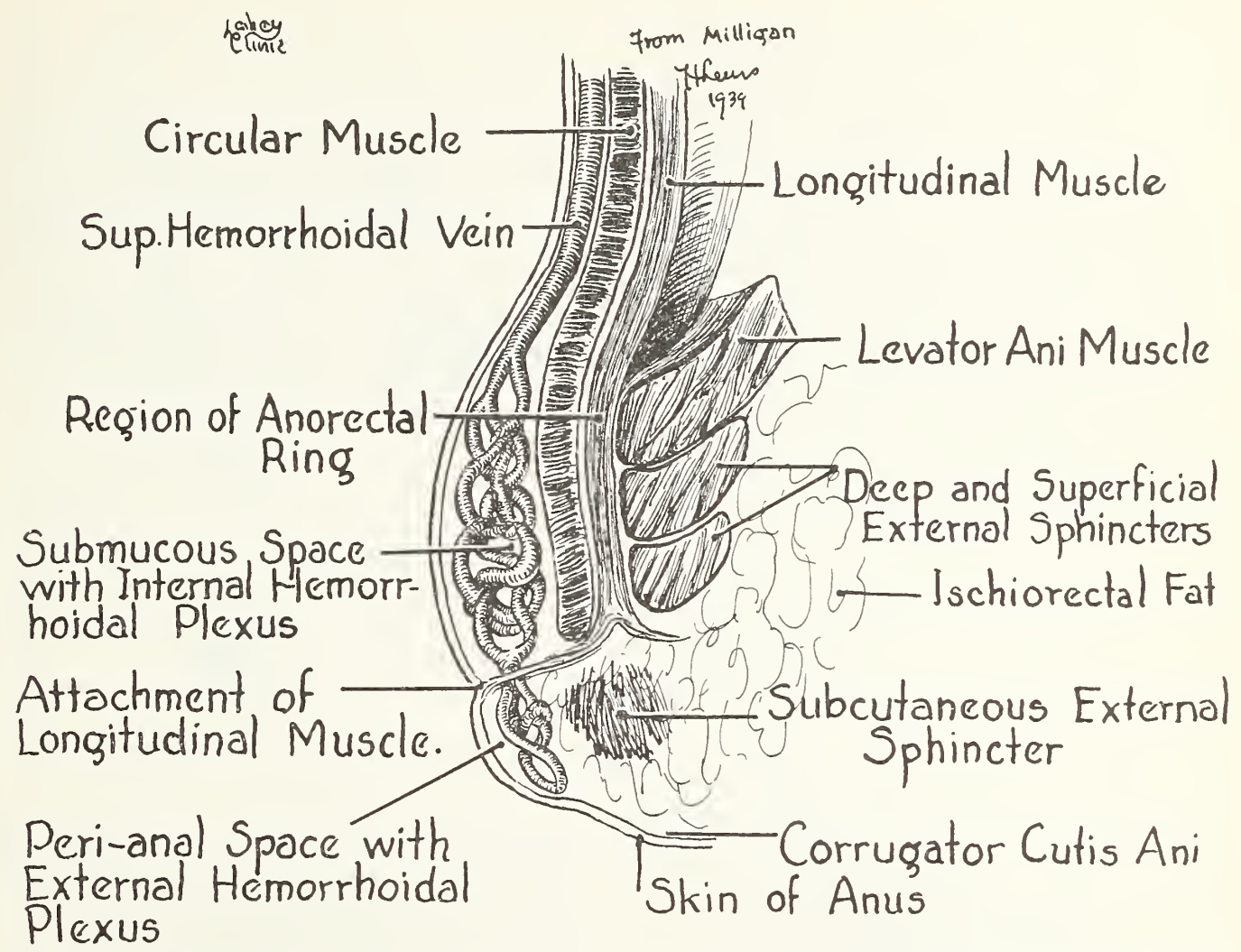


Fig. 4. Cross section of anal canal showing anatomy of mucosa, hemorrhoidal tissue and musculature in this region.

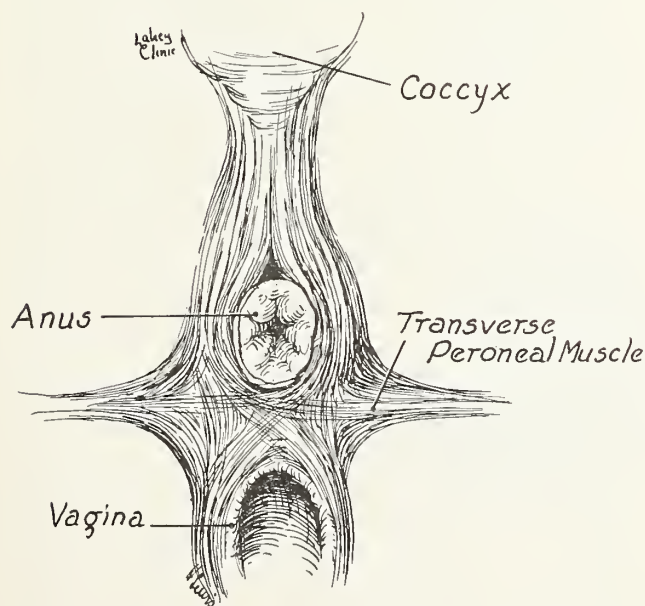


Fig. 5. Origin and relation of anal sphincter to rectum. Note resulting weak point in anal canal of supporting structures at posterior commissure.

internal hemorrhoidal plexus. It is important to remember that this mucosa down to the level of the crypts or the anorectal line does not contain sensory nerve endings and when hemorrhoidal injections are done, the needle must be thrust into the hemorrhoids above the anorectal line. The anal skin overlying the external hemorrhoidal plexus has a superabundance of sensory nerve endings, which accounts for the extreme pain experienced in fissures and thrombi in this region. The internal sphincter muscle is of little importance from a surgical standpoint. It consists of a thickening of the longitudinal fibers of the bowel wall. On the other hand, the three divisions of the external sphincter muscle are of the utmost importance and their position and location must be thoroughly appreciated. The subcutaneous division of the external sphincter lying immediately beneath the skin and frequently called the "pucker string" of the rectum, so easily seen

with the patient straining under an inhalation anesthesia, is of the greatest importance. When this muscle is replaced by fibrous tissue as a result of the repeated trauma of chronic catharsis or bowel dysfunction it leads to the so commonly encountered contracted anal sphincter. The position of the levator muscles must be appreciated, particularly in the surgery of fistulas. The fact that the external hemorrhoidal plexus tends to drain into the superior hemorrhoidal veins explains why the majority of patients do not have hemorrhoids confined to one area or the other, but almost invariably have hemorrhoidal areas in both internal and external positions.

In Figure 5 a cross section of the anal sphincters is noted. It will be observed that these muscles originate at the tip of the coccyx, sweep forward in a parallel position, then encircle the bowel and combine with the transverse perineal muscles anteriorly to form the perineal body. The separation of these muscle fibers at the posterior commissure results in a weakness in the supporting structures of the bowel at this point. It is for this reason that 90 per cent of all anal fissures in the male and the internal openings of a large number of fistulas are found in this position.

THE CONTRACTED ANAL SPHINCTER

A "contracted anal sphincter" is probably the most common pathologic entity of the anal canal. It may be found without apparent evidence of other disease of the anal canal or may be associated with fissures, thrombi, or other conditions. It may be an actual fibrous contracture of a portion of the anal ring or may be simply spasm, or both. Certainly, many patients with this condition, because of the actual mechanical difficulties in moving their bowels, consult their family physician with a chief complaint of constipation. Unless this condition is discovered by adequate examination, the treatment of constipation will be very unsatisfactory until this local anorectal pathology is corrected. When manual dilatation of the anal canal is attempted under anesthesia, the first point of resistance to the dilating fingers is the subcutaneous portion of the external sphincter

muscle. It is the spasm of this muscle or the replacement of this muscle by fibrous tissue which has, in our experience, invariably been the cause of the so-called "contracted anal sphincter." We no longer believe that prolonged traumatizing manual dilatations of the rectum should be done. In Figure 6 the

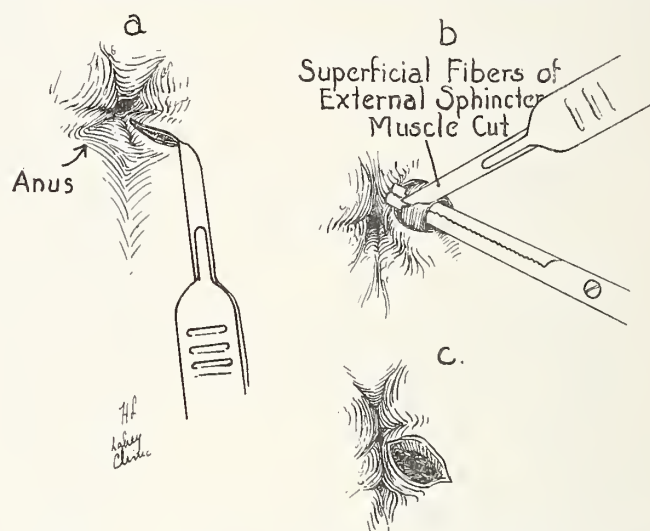


Fig. 6. Division of subcutaneous division of external sphincter muscle.

subcutaneous division of this muscle is demonstrated. This procedure is much less traumatizing and more satisfactory than extremes of manual dilatation. Division of these muscle fibers is also done when fissures are associated, or in association with hemorrhoidectomy if the anal canal is contracted.

FISSURE IN ANO

The large number of long-standing, chronic anal fissures seen in our practice is impressive. It indicates to us that the treatment of these fissures in their acute stage has either been neglected or improperly carried out. A typical chronic anal fissure is seen in Figure 7. Almost invariably there is found an overlying sentinel pile and also a second entity which has been overlooked by many, a large, hypertrophied papilla at the proximal end of the fissure. To cure this condition it is necessary to excise the fissure completely, the underlying and surrounding scar tissue, the hypertrophied papilla and the overlying sentinel pile, and as we have stated previously, usually we divide the subcutaneous portion of the external sphincter muscle. This procedure, with the partial reconstruction of the anal canal by pulling down the anal mucosa over the former base of the pile, is shown

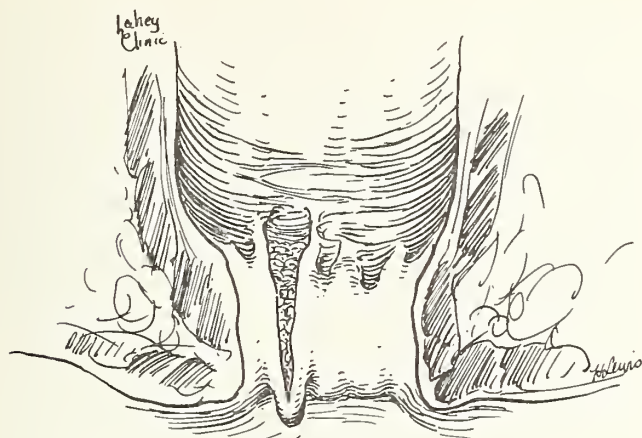


Fig. 7. A typical fissure-in-ano.

in Figure 8. Simple dilatation of fissures at this stage is not sufficient. The remaining scar tissue that has not been excised is a persistent weak point in the anal canal and is the basis for the large percentage of recur-

rences when this procedure alone is carried out. There can be no question but what a simple dilatation of the anal canal in the acute phase of this disease leads to a high percentage of cures.

Many advocate, as an ambulatory form of treatment of fissures, the injection of the base of the fissure with various of the local anesthetics in oil preparations. This theory is based on the fact that, by producing a local anesthesia in this part of the musculature of the anal canal and the release of spasm in this area, the fissure will be allowed to heal. Our experience with this method has been limited but it is our belief that this same criticism, that is the failure to remove all local pathology surgically, will lead to an appreciable incidence of failures with this type of treatment.

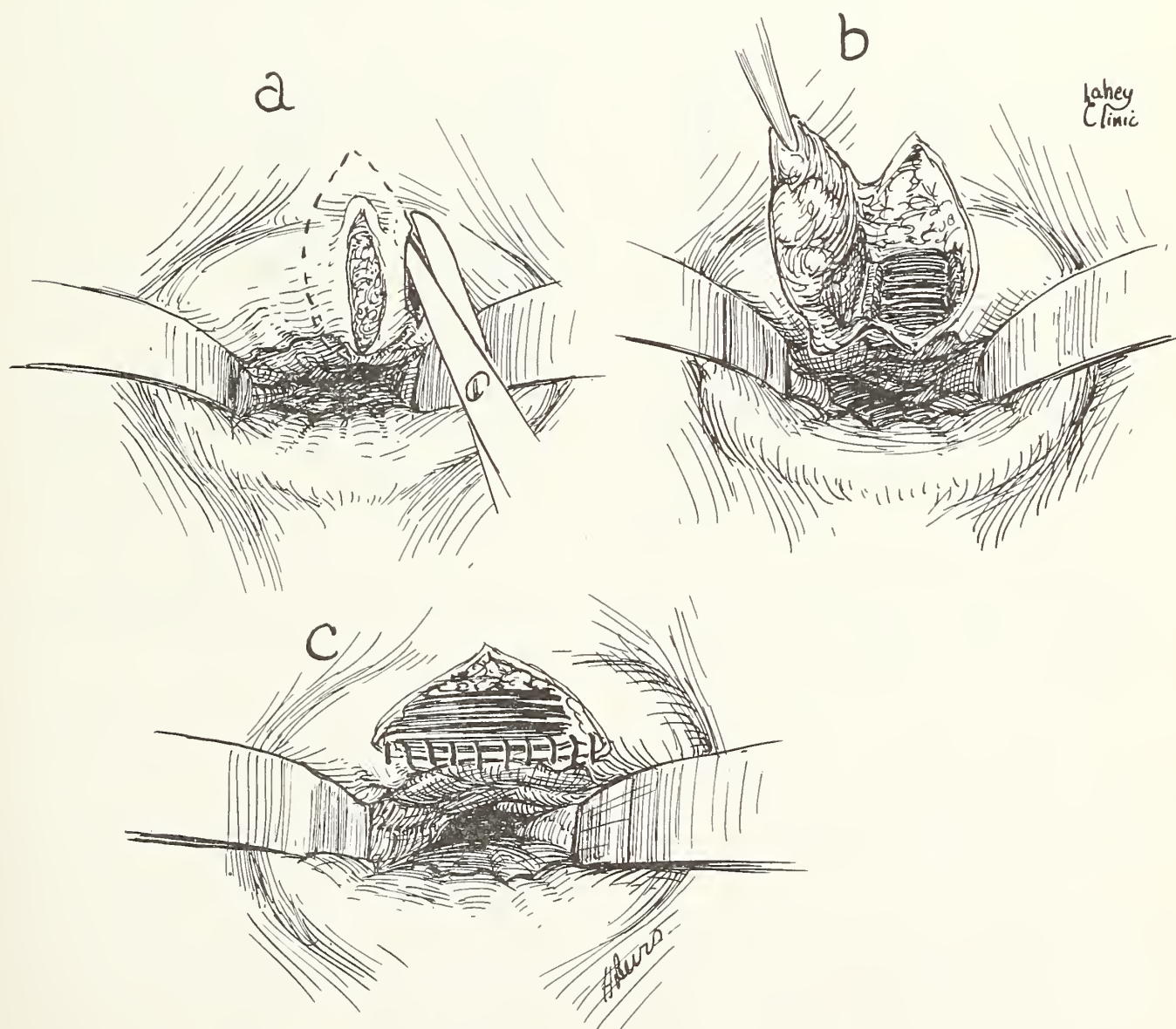


Fig. 8. Radical excision of chronic fissure-in-ano.

HEMORRHOIDS

The management of hemorrhoids may be a complicated problem and only certain basic principles for their treatment can be mentioned here. It is almost universally agreed among proctologists that the clamp and cautery removal of hemorrhoids is not the best way to remove them. Except in the hands of those skilled in the clamp and cautery type of excision, hemorrhoidal tissue is inadequately removed, and certainly the edema, pain and resultant scarring following this type of removal are responsible for the dread that so many patients have had in the past for hemorrhoidectomy. Hemorrhoids can be removed by excision and suture in a scientific manner based on anatomical principles, with no more postoperative discomfort and with as excellent end results as can be obtained with any other surgical operation.

Figure 9a and b demonstrates diagrammatically the technic which we employ for the average hemorrhoidal condition. In this procedure the external and internal hemorrhoidal plexuses are completely excised, the anal canal is reconstructed so that there is no scarring left above the anal margin, and a V shaped angle for drainage remains on the outside so that these wounds heal cleanly, with a minimum of discomfort to the patient.

There are certain conditions in which this type of hemorrhoidectomy is not entirely satisfactory. In cases in which complete rosettes of large, prolapsing hemorrhoids are found, some type of a modified Whitehead procedure, such as the plastic amputation type advocated by Buie, should be carried out. The operation, however, is technically difficult. The ordinary Whitehead procedure as carried out years ago should never be done. Any radical hemorrhoidectomy should be done only by

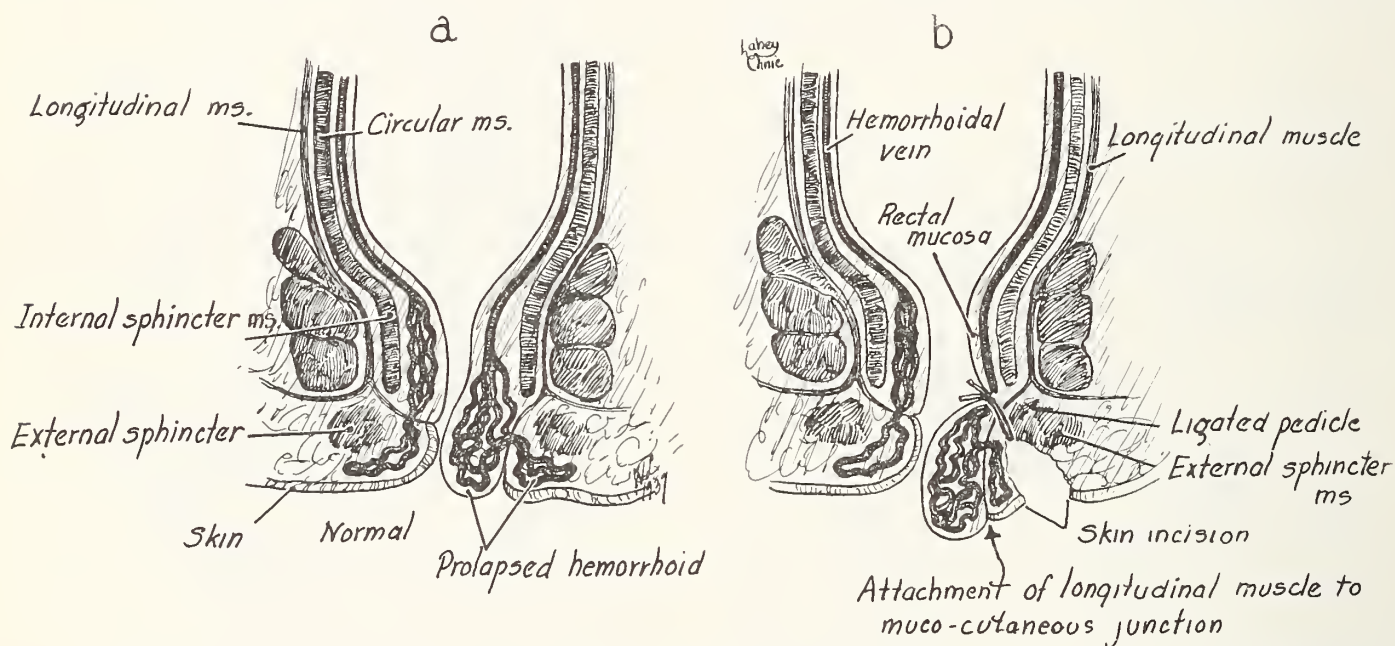


Fig. 9. a and b, Diagrammatic illustration of hemorrhoidectomy. Note excision of complete internal and external plexus and reconstruction of anal canal by suture of hemorrhoidal pedicle to subcutaneous division of external sphincter muscle fibers.

those with considerable experience in this field.

The use of hemorrhoidal ointments, suppositories, salves and so forth in the treatment of hemorrhoidal conditions is mentioned only to be condemned. We have never observed any lasting benefit from any of these forms of treatment. Certainly the brief alleviation of symptoms which can sometimes be obtained may be extremely dangerous as it may mask more serious conditions which are present.

A high percentage of patients with hemorrhoids will have associated bowel dysfunction, usually constipation. We believe very strongly that this is another problem which has not in many cases been given sufficient attention. In our treatment of these patients we do not resort to the use of laxatives, even mineral oil, in the preoperative preparation of these patients, their postoperative care, and never in their subsequent treatment. The night previous to hemorrhoidectomy our patients are prepared with a simple cleansing

enema. The morning of the third day after operation, a small, oil retention enema is given. If this is not sufficient to start bowel movement, a saline enema (3 pints) is given on the fourth day and subsequently when necessary. We make no attempt to constipate these patients. They are placed on a bland but adequate and full diet the day after operation; harsh, bulky foods are eliminated from their diet, and they are encouraged to drink large quantities of water, if necessary, hot water, and to eat cooked fruit and other bland substances. Narcotics should be given for the immediate relief of postoperative pain. Postoperative discomfort can best be controlled by the application of massive hot, wet dressings. It is our practice to apply massive, hot, wet dressings to the rectal area soon after operation; they are applied and changed every hour for two or three days following the operation. At the end of that time sitz baths twice daily usually will be sufficient. Gentle digital examination of the rectum should be done after operation before the patient leaves the hospital, and probably every few days after he is discharged until the rectal area is completely healed.

Other types of treatment are satisfactory for certain selected cases of hemorrhoids. We have not had any personal experience with the various forms of electrical treatment. This treatment is based on the theory of coagulation of the hemorrhoidal area. From our observations of these patients who have been treated elsewhere, our chief criticism has been of the resulting scarring which persists in the anal canal. We do, however, treat quite a large number of patients by means of injection. Quinine and urea hydrochloride, 5 per cent, is the most satisfactory solution for this purpose. We have found that a 5 per cent phenol solution in almond oil produces somewhat better thrombosis, but also has in the past resulted in a higher percentage of complications. In this technic the needle point is thrust into the internal hemorrhoidal plexus, being certain that the needle is above the anorectal line, and the pile area is symmetrically distended by a perivascular infiltration of the fluid. This infiltration results in an inflammatory condition which gradually scarifies, contracting the venous sinuses and

shrinking the hemorrhoidal area. In our experience few patients probably are cured of their hemorrhoids by this treatment, but it is true that a large number of patients with this treatment, together with adequate regulation of their bowel function, can be relieved indefinitely.

External hemorrhoidal areas obviously can never be injected. The treatment is confined of necessity to the internal hemorrhoidal plexus. The injection type of treatment should never be carried out where there is associated disease such as infected crypts, thrombi, fissures and so forth. These conditions are usually made manifest by rectal pain and patients having rectal pain are rarely submitted to the injection type of treatment. The ideal indications for the injection type of therapy are for hemorrhoids which are primarily internal, which bleed, which are not associated with any particular pain and which protrude only slightly. In this group of patients satisfactory results by the injection type of therapy can be anticipated.

PERIRECTAL ABSCESES AND FISTULAS

Again in this discussion we cannot take up in detail this extensive problem. We believe that perirectal abscesses invariably have their origin at the level of the anorectal line in the region of the crypts. Concretions or some type of obstruction at the base of the crypts result in a small abscess which perforates the rectal wall, causing a perirectal abscess. This abscess may follow a great many different paths, and in Figure 10 some of the possibilities are illustrated. This abscess usually erupts to the exterior or into the anal canal at a different level. The contracted abscess cavity with its adjoining sinuses thus forms a fistula.

Abscesses in this region should be adequately drained at the earliest possible opportunity. When detected early and properly drained, fistulas will not necessarily develop. However, with delay a fistula will invariably result.

The treatment of an anorectal fistula is invariably surgical. It consists in the complete excision of the primary internal opening, the external opening, the excision of the intervening sinus tracts and careful postoperative

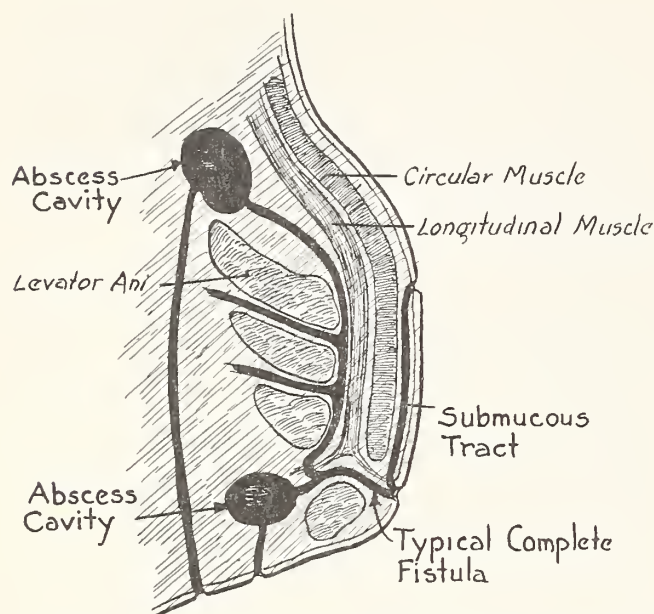


Fig. 10. Various types and location of fistulas which may develop from an abscess in the region of the crypts of Morgagni.

care to allow complete and adequate healing. Approximately 35 per cent of the patients with fistulas seen at the clinic have had previous operation. These failures are due in the main to three facts: (1) Failure to discover and adequately remove the internal opening. This opening except in rare, traumatic cases, is invariably at the level of the crypts. A large percentage of these occurs at the posterior commissure. There will be occasions when a probe can be passed through a sinus tract to the mucosa through a fistula and yet no internal opening will be noted at that point. In these cases we believe that the internal opening is temporarily healed but that recurrences will take place unless a wide area where this internal opening has existed and where there is a resultant scar is excised. (2) Failure to open and excise secondary sinus tracts. This, in our experience, has not been the cause of a high percentage of failures. All sinus tracts must be carefully searched for and excised. (3) Improper after-care. This is the cause of a large percentage of recurrences. At the time of operation all overlying strips of mucosa and skin must be excised. The wound should be packed gently, never firmly, and all packs and drains removed by the first or second day postoperatively. We rely on the passage of a well lubricated gloved finger to the base of these tracts every day or two postoperatively until the area is entirely healed to insure adequate

healing from the base of these wounds. No attempt is made to constipate these patients, but local irrigations or sitz baths should be continued to keep these wounds as clean as possible.

PREMALIGNANT LESIONS: RECTAL AND COLON POLYPS

We have reported recently* a large series of mucosal polyps of the colon and rectum. It has been convincingly demonstrated that these are definite premalignant lesions. As our indications for sigmoidoscopic examination of patients become more widespread and more and more of these examinations are done, an increasingly larger number of these tumors will be found. When encountered, they should be removed or destroyed. Several points concerning polyps should be remembered. In our experience 35 per cent of patients having polyps have multiple lesions. When one polyp is discovered, others should be searched for. They may occur at any age and have an equal distribution in the sexes. Seventy per cent of all polyps will be found within reach of the 10-inch sigmoidoscope, which is the same distribution as that of malignant disease in the colon and rectum. Histologically, malignancy may develop in any portion of a polyp, and this means that a single biopsy specimen taken from the surface of a polyp is in itself not sufficient to determine the actual presence of malignancy in such a lesion (Fig. 11). A biopsy specimen should consist of a cross section of the entire polyp, together with its base. Fixation and induration to palpation of these tumors are pathognomonic of malignancy. The detection of small lesions of this type above the lower sigmoid will depend on the very careful use of the contrast air study of the colon rather than on the ordinary barium enema roentgenogram. Polyps below the level of the peritoneal reflection can be adequately removed by high frequency fulguration. Above the level of the peritoneal reflection, because of the potential danger of hemorrhage and bowel perforation, colotomy is the treatment of choice.

* Swinton, N. W., and Warren, Shields: Polyps of the colon and rectum and their relation to malignancy. *Jour. Am. Med. Assn.*, 113:1927-1933 (Nov. 25), 1939.



Fig. 11. The complete story of the development of a malignancy in a benign polyp. In the insert the entire polyp, together with its pedicle and a wide area of base, is shown. The distal two-thirds of this polyp shows typical adenocarcinoma.

SUMMARY

Some of the problems of anorectal surgery have been brought out in this discussion. These problems should be thoroughly appreciated by those who have the most intimate contact with their patients, that is the general practitioner, and should not be left entirely to the highly trained specialist. The indications for rectal and colon examinations

should be thoroughly understood, and when these indications are present, careful and thorough rectal and colon examinations should be done. The anatomy of the anal canal is briefly reviewed. Some important factors in the treatment of the contracted anal sphincter, anal fissure, hemorrhoids, perirectal abscesses and fistulas are mentioned. The significance and importance of rectal and colon polyps are given.

The need of national defense requires a strengthening and broadening of the entire industrial health program all along the line from private industry to local, state and federal jurisdictions. In this significant period of rearmament during which our chief defense will be our industrial skill, let us be sure that we place first on our list the health and safety of our industrial workers.—L. D. BRISTOL, M. D., *Jour. Amer. Med. Assn.*, Oct. 12, 1940.

A normal chest roentgenogram should be the criterion of acceptance in a future mobilization, including the draft for training, and it should be made and reported before the recruit has spent a night away from his own roof to obviate a repetition of the claims for aggravation of pre-existing tuberculosis which occurred during and after the World War.—RAMSAY SPILLMAN, M. D., *Jour. Amer. Med. Assn.*, Oct. 19, 1940.

*Diabetes, the Problem from the Standpoint of the Surgeon**

By HARRY BRINKMAN, M. D., Wilton, Maine

Since the advent of insulin and a resulting increased life expectancy for the diabetic patient, surgical complications have also increased, particularly those associated with peripheral vascular sclerosis. Along with this increasing incidence there has been a gradual decrease in the mortality from these complications as shown by statistical lists in the current literature. This improvement in mortality lists has been largely credited to a closer coöperation between the internist whose problem it is to get and keep the diabetes under control and the surgeon whose task it is to rid the patient of his offending lesion. The old Biblical injunction that "If thy hand or thy foot offend thee cut them off and cast them from thee" is doubly applicable to the diabetic. The list of offending members might be indefinitely lengthened to include practically every member of the body but with the exception of the thyroid gland the most common offense is that of harboring infection. Whether or not the diabetic patient as such is more susceptible to infection than is the patient with a normal carbohydrate metabolism is perhaps debatable. When one considers the countless number of injections given these patients, often with faulty technique, one marvels at the infrequency with which infections occur. Once infection has been established however, there can be no doubt that carbohydrate tolerance is decreased and oftentimes alarmingly so.

Obviously the diabetic, like the patient with normal metabolism, is subject to the ordinary surgical lesions. Fortunately the majority of these cases are not urgent and their diabetes can usually be brought under control prior to operation. General surgery in this type of individual can usually be carried out with a mortality comparable to that in patients without this disease. However, let us remember that we cannot operate upon patients with diabetes with the same degree of safety that we can on patients without this disease. It is

important that the patient be in carbohydrate balance both pre- and post-operatively. For this phase of the treatment we should seek the aid of the internist whose interest and experience lies in this field. In the larger hospitals where specially organized departments are available this is not difficult but in many of our smaller hospitals this may be a distinct problem. Let no one assume that the average general surgeon can be his own internist and dietitian but let each of us "stick to our own last" and seek the coöperation of our colleagues whose interest and experience cover this phase.

In a recent article McKittrick¹ briefly summarized some medical observations of a surgeon and these seem important and concise enough to bear repetition.

(1) "For an operation of election the patient should go to the operating room well fed, with his liver stocked with glycogen, acid free, and with no more than a trace of sugar in his urine. These are important points.

(2) "An emergency operation may be done in the presence of acidosis if the urgency demands this risk.

(3) "It is unnecessary and dangerous to attempt to render the urine sugar free within 3 days after operation. So far as I know there is no evidence that a moderate elevation of blood sugar — after operation in any way interferes with the healing of clean surgical wounds.

(4) "Insulin dosage based on urine tests is simple and safe provided the doses are small, that the patient is emptying the bladder, and that hypoglycemia is guarded against by occasional blood sugar determinations as soon as the urine is sugar free.

(5) "If intravenous glucose is given, it is dangerous and unnecessary to attempt to utilize all of the glucose given by an estimated

* Presented at the Medical Conference at the 88th Annual Session of the Maine Medical Association, Rangeley Lakes, Maine, June 24, 1940.

dose of insulin. It is even more dangerous to give insulin for glucose which usually spills over in the urine after intravenous injection."

(6) "Failure to recognize a marked increase in the carbohydrate tolerance following the removal of an infected leg or drainage of a carbuncle or large abscess is a frequent source of hypoglycemic reactions."

The problem of surgical technique and that of anesthesia is essentially no different than it is in the individuals with normal carbohydrate metabolism. It is well to remember what Dr. Joslin has said as reported by McKittrick that a diabetic patient is as old as his age plus the duration of his diabetes. So as we usually in the elderly individual give more particular care if possible to the handling of tissues and to the choice of the most innocuous anesthetic so also should we do in the diabetic.

In acute surgical emergencies such as strangulated hernia, tubal pregnancy with hemorrhage, perforation of a viscus, etc., where delay of hours may be fatal, the chief problem is to operate at once and as speedily as is consistent with safety. These procedures may have to be carried out in the presence of acidosis. Here the basic principle to be remembered is that clinical acidosis will not develop or progress if sufficient glucose is oxidized. This is primarily the problem of the internist and necessary preliminary treatment can usually be carried out intravenously during the operation without appreciably interfering with the surgery.

Very occasionally severe acidosis may present a picture not unlike that of an acute abdomen. The patient may have acute abdominal pain, fever, and marked leucocytosis. The diagnosis may be a very difficult matter. One should be very reluctant to subject a patient with glycosuria and acidosis to surgery unless the history, signs and symptoms are definite. Cases do arise where a definite diagnosis cannot be made and in these it may well be advisable to explore the abdomen through a small incision under local anesthesia rather than to wait. It may be much safer to "look and see than to wait and see."

The surgical complications in diabetes that most frequently give rise to our greatest con-

cern are those found in the elderly patient with vascular sclerosis. The diabetic patient even if his disease is kept within limits will develop vascular changes to a greater degree than will the individual with normal metabolism. These patients are in the later decades of life particularly prone to suffer from vascular occlusions and it is this involvement of the vessels of the lower extremities that so frequently demand the attention of the surgeon.

These lesions of the lower extremities in the diabetics have been roughly grouped under the term of "diabetic gangrene". This is really a misnomer, actually it is usually arteriosclerotic gangrene in a patient with diabetes. This grouping of all lesions in one large class has led to much confusion and lack of proper discrimination. On such a basis one is prone to fall into the error of jumping to the conclusion that any diabetic patient who develops gangrene will necessarily sooner or later be subjected to a major amputation. This is not true. Conservative treatment can be carried out in many of these cases but they must be carefully chosen. We read much in the literature of such procedures as using the oscillometer, the taking of skin temperature readings, and arteriography for determining the status of the peripheral circulation. For many of us, situated as we are, these procedures are either too technical or are not even available and we must therefore depend upon our clinical senses in choosing the right procedure in each particular case. Can this be done with any degree of accuracy? In a recent article Williams and O'Kane² present such a classification which appears to be practical and to be based on sound and accepted observations. I shall draw heavily upon their presentation for this phase of the problem.

This group of lesions of the lower extremities consists of two basic pathologic elements; (1) peripheral arteriosclerosis with circulatory insufficiency and (2) infection. These two elements either separately or in combination imply therefore three classes of lesions; those that are purely vascular, those that are purely infectious, and those that are mixed. The mixed lesions may be further subdivided depending upon the degree of each basic element operative in any case.

A purely vascular lesion, one due entirely to circulatory insufficiency, is initiated by gangrene, a necrosis without infection. A purely infectious lesion shows no circulatory deficiency and therefore no gangrene. In the mixed lesion, if the circulatory element is predominant there is usually initial gangrene followed by infection of a great or less degree either very soon after the gangrene or at a later time. In the predominantly infectious lesions gangrene may develop later as a result of impaired circulation in the collaterals due to edema and swelling. This produces the cases of so-called "wet gangrene". From this brief presentation it can be seen that by closely correlating the history of the initiation and progress of the lesion with the physical findings one can quite accurately trace the sequence of events and determine what procedure is most likely to give the best results.

The status of the circulation is determined largely by observing the age of the patient, the presence of concomitant cardio-renal dis-

ease, the presence and type of pain, muscle, skin or nail atrophy, the filling response following elevation, manual palpation of skin temperature, the pulsations of the dorsalis pedis, posterior tibial, popliteal, and femoral arteries, capillary circulation, and if it seems indicated X-ray evidence of vessel and bone changes.

The status of the infectious lesions is determined largely on the same basis as infections elsewhere in the body; the general condition of the patient, temperature and pulse curves, leucocytic response, local extent of the inflammation, presence or absence of lymphadenitis and lymphangitis, blood culture and type of organism, X-ray examination for osteomyelitis, and in certain cases the response to conservative therapy with elevation and hot compresses.

On the basis of this classification and interpretation Williams and O'Kane present the following table of surgical procedures in this group of lesions.

Classification	Character of Lesion	Surgical Procedure
Vascular		
"Four plus vascular"	Superficial	No operation
	Localized	Amputation at calf if collateral circulation is good
	Extensive	Amputation at thigh (urgent)
Mixed		
"Three plus vascular"	Spreading	Amputation at thigh (urgent)
"Two plus vascular"	Spreading	Amputation at calf (urgent)
"One plus vascular"	Superficial	No operation
	Localized	Incision and drainage; amp. of toe
	Spreading	Amputation at calf (urgent)
Infectious		
Four plus infectious"	Superficial	No operation
	Localized	Incision and drainage
	Spreading	Incision and drainage (urgent)

With the conclusions in this table I would in general agree except to mention that leg amputation should be reserved for only the exceptional case. Our evaluation of the status of the circulation is still too gross and the difference in the value of a leg stump as compared to one at the lower thigh is so little that it is usually better to amputate at a greater distance from the infection and at a level where the blood supply is more likely to be adequate.

Many purely vascular lesions which are superficial will heal spontaneously if infection can be avoided and sufficient time is given. If infection enters the picture is changed. Only recently we had a patient who was witness to this fact. She had had a superficial area of gangrene on the left foot which she claimed she had healed by faith. It took some considerable time. Not long afterwards she developed a similar lesion on the right foot which she promptly attempted to heal in

a similar manner. Infection supervened and she was indeed fortunate to survive a low thigh amputation for on admission she was in acidosis and had a blood sugar level of 600 mg.

Purely infectious lesions with adequate circulation are treated either conservatively or by incision and drainage as early as possible as are hand infections in order to preserve function as well as life. In the mixed lesions similar principles apply. Those with advanced circulatory changes with infection are the most dangerous and usually require thigh amputation.

It will be noted that in this group of lesions, except for an occasional leg amputation there are but three operative procedures; local incision and drainage with sequestrectomy if indicated, toe amputation, and thigh amputation. So far as technique is concerned the important points are the observance of strict asepsis to avoid the introduction of foreign organisms, amputation without a tourniquet, the avoidance of undue tissue trauma, and the avoidance of dissection in muscle and fascial planes in order to preserve the collateral vessels which usually come off more or less at right angles. In major amputations, preparation of the skin is perhaps important but surely the majority of infected stumps result from infection already present in the lymphatics. Long flaps to insure beautiful

closure should be avoided and guillotine amputation where the infection is advanced should be employed and the wound left open. This can be closed secondarily after the infection has been overcome. Closure should be loose with as little suture material as possible. Whether to drain or not is often a difficult question to solve but the old rule of draining when in doubt is perhaps a good one. If a drain is inserted it should be removed in 12 to 24 hours after the excessive oozing has subsided and it should be so placed that it can be removed without disturbing the original dressing.

Obviously the mortality in this group of cases will remain relatively high but many statistical reports are available to show where increased attention to detail in these cases has materially reduced the percentage of deaths. No doubt there is much room for improvement in all of our hospitals and it behooves us surgeons who seek to rid the diabetic patient of his offending lesion or member to routinely seek the counsel of our medical colleagues whose task it is to treat the primary disease.

- (1) McKittrick, Leland S., Surgical procedures in the presence of Diabetes Mellitus. *Surgery, Gynecology, and Obstetrics*, 1939, 68 2A, 508-518.
- (2) Williams, F. W., and O'Kane, T. J.: Clinical Classification of Lesions of the Lower Extremities Associated with Diabetes. *Arch. of Surg.*, 1940, Vol. 40, No. 4, 685-693.

It is well to remember that during one year tuberculosis among the veterans of the World War cost the United States government more than 46 million dollars, exclusive of the cost of hospitalization. One-third of the total amount paid out for compensation to the services was for tuberculosis and 61,330 veterans were in hospitals at government expense. In this day of pensions and augmented government health services, every known scientific procedure should be used to cut down this enormous burden on the taxpayer. Tuberculosis can be detected by the use of the X-ray. The experience of twenty odd years ago need not be repeated.

The examination of familial contacts of tuberculin-positive children between the ages of six months and six years, may be a valuable case-finding procedure, since the opportunity for tuberculous infection among very young children is limited to the immediate family circle.—PAUL PHELPS, M. D., ET AL, *Jour. Pediatrics*, Oct., 1940.

Ill health is rarely caused by tuberculosis until the disease is moderately advanced. Symptoms may be absent in the presence of extensive disease.—H. W. HETHERINGTON, M. D., and H. L. ISRAEL, M. D., *Amer. Jour. Hyg.*, Jan., 1940.

*Trends in the Treatment of Tuberculosis**

By GEORGE YOUNG, M. D., Redington Memorial Hospital, Skowhegan, Maine

Collapse therapy, or the surgical treatment of tuberculosis, has proven itself in the past few years, to be an important addition to the treatment of the tubercular sick. The State of Maine was among the earliest to introduce this type of treatment. In fact in 1918 we had a sizable series of pneumothoraxes. In 1925-30 we had a group of completed phrenectomies and thoracoplasties. There are very few clinics of this nature in the United States that antedate those in the State of Maine. It must not be forgotten, nevertheless, that the Senatoria, unaided by surgery, have cured many thousands of patients by their rest treatment and through the stimulation of general resistance to tuberculosis. Surgery today would be helpless in itself without such support and it is upon this indispensable foundation that our surgical treatment is built.

It was indeed gratifying to those of us who were seriously concerned with the treatment of this disease when one of our member hospitals opened its doors to the tubercular sick patient eight or nine years ago. During this period the group in this institution has done much to stimulate the general intensity of our work. In spite of all this, it is sad to note that over 50% of our admissions in all clinics at the present time are still advanced cases demanding radical treatment. There was a period in each of these cases during which minor treatment would have been effective but the golden opportunity was missed; either because of the absence of an active clinic near these patients or the failure of some physician, or the patient himself, to consider tuberculosis in a thorough examination.

Before active surgical treatment can be attempted, there is much painstaking work to be done. A thoroughly up-to-date X-ray department is absolutely necessary. We must have before us in the conference X-ray films that will tell us as much as possible concerning the type and stage of the disease as

well as its effect on all of the other organs of the thoracic cage. The X-ray department will retake, before and after each stage of the operations, to determine the progression or regression of the disease. The pathological laboratory gives us information embodied in blood counts, sedimentation rates, sputum examinations, and many other vital examinations to determine the reaction of that patient's body to his disease. By such examinations, we may be able to choose the right moment to proceed. The Internist in our group, likewise, evaluates the patient's reaction and resistance to his disease and discovers, if possible, any co-existing pathology in the lung or in other organs of the body. The Bronchoscopist gives us information concerning the upper respiratory tract and bronchial tubes. At times he finds an active tubercular lesion in the bronchial mucosa which will explain the persistency of a positive sputum in a case regardless of a successful mechanical collapse having been performed thereby saving us the error of attempting to correct the sputum of the patient by more surgical procedures. He is even more valuable in his aid in differentiation for this clinic of which I am speaking must be familiar with all other diseases of the chest. At times it is through the bronchoscope that one discovers the early malignancy of the lung or learns exactly from which lobe the inflammatory process is spilling its secretions.

After all this material has been collected and we have discussed the case in conference and have chosen our surgical procedure, the problem of anesthesia presents itself and is a real problem. I am frank in saying that the choice of an anesthesia and its administration are as important as the surgical technique itself and on it may depend the success or failure of the whole procedure. New machinery and new combinations of gases are presenting themselves constantly, and if we are to believe all that we read, much can still

* Read before the Maine Hospital Association, Lakewood, Maine, August 21, 1940.

be done along this line. The anesthetist must be as familiar with the patient's blood picture as with his fluid balance, idiosyncrasies and allergies because upon all these depends the success of the postoperative period as well as the period of anesthesia.

To bring the subject a bit nearer home, I wish to present two cases taken at random from one of our clinics hoping that you will find a few revealing points that might be of interest to you.

The first case: M. F., a young lady, age 18, housewife.

Admitted: February 11, 1935.

Family history: One of the brothers has been coughing for the past seven months and has lost weight. Both her grandmother and grandfather were said to have died of tuberculosis.

Patient's Past History: We note that she had pneumonia at the age of 1½ years and again at 4 years; that she has always been emotional, easily upset; that three years ago she had her first pain in her left chest. This lasted intermittently throughout the winter. She was married in September, 1933. Her first child was delivered six weeks before her admission in a hospital in this state. She entered that hospital because of frontal headaches, blurring vision, swelling of the hands and ankles and night sweats. The hospital reports a high blood pressure and albumin but no X-ray plates or physical examination of the chest were available. She came to our clinic one month later *complaining of:* severe weakness, productive cough, night sweats and such.

Our laboratory examination revealed: definite kidney disturbance.

Our physical examination and x-ray plates revealed: a far advanced tuberculosis with cavity in the right mid-chest.

Her blood picture and sedimentation rate were consistent with the x-ray findings.

First Plate #1: On this first plate we noted a large, thick walled cavity in the right chest with considerable infiltration to the surrounding tissues. Because of the situation of the cavity and the amount of collapsable lung

around it, our conference chose the phrenic operation.

Plate #2: showed a cavity closed, the diaphragm elevated, and our charts showed a conversion of sputum. The patient has gained considerable weight and appears in all ways normal at this date.

The second case: G. H., a young lady, age 30, housewife.

Admitted: July 14, 1937.

Family History: her mother died at 36, with questionable cause of death. One of her sisters died of tuberculosis.

Patient's past history: includes the fact that she had influenza 13 years ago; was ill one month with fever. She had the grippe one year ago with some fever. She had pleurisy on the left side at that time. She gave a general history of having infrequent colds and irregular menses.

Present illness: her chief complaints were cough and soreness in the left chest which began in May, 1936 (1 yr. and 2 months before admittance) and states that since May, 1936, she has not felt well. Had considerable weakness with a cough gradually becoming worse until about 2 months ago she had blood-tinged sputum. On this date, one year from the onset of her symptoms, an X-ray was suggested by her attending physician. She entered the hospital, as before stated, on July 14, 1937.

Laboratory report: on July 16, 1937, she had a white blood count of 7,850, with a hemoglobin of 12.8. Her differential blood count showed a predominance of polynuclears. Her sedimentation rate was high; her urine examination and serological tests were negative; her sputum and fluid, drawn from the thoracic cage, after thorough examination produced acid fast bacilli. A definite diagnosis of tuberculosis was therefore made.

X-ray plates: Plate #1: taken on the next day after admittance, on July 15, 1937, showed an active pulmonary lesion in the left chest with a cavity in its apex with the heart retracted toward the left side and the left diaphragm slightly elevated. This is the type of chest in which a pneumo-thorax is usually chosen as the primary procedure. A pneumo-

thorax was instigated after a short period of bed rest.

Plate #2: taken October 13, 1937, we have a lung separated from the thoracic wall. It has pushed the cavity inward but has not efficiently closed it. The case is still active with an open cavity and our conference notes, on this particular date, suggest that we do an inter-pleural *pneumonolysis*. There is running from the cavity around to the parietal pleura, a heavy band adhesion which will appear to be responsible for the failure of the inter-pleural air to close the cavity. Shortly after this date, the chest was entered using a corilis instrument and the adhesion was severed. Pneumothorax was continued.

Plate #3: taken a little later; we noted that the string shadow had disappeared and a pneumo thorax had collapsed the surrounding tissues but had left the cavity wide open, probably due to the stiffness of its wall or

to its bronchial connections. The apex of the lung was still adherent high in the apex. The patient was still showing positive sputum, although the lower portion of the lung was healing. After consideration of the case at a few conferences, a thoracoplasty was decided upon as the only means of a cure. This thoracoplasty was begun shortly afterwards by two stages and 7 ribs were removed; all of the upper 3 from the spine to the costal-cartilages in front and a good generous portion of the lower 4. During this operation, the apex of the lung with its cavity was dissected from its attachment at the parietal wall and brought down to the mid-thoracic region close to its root.

The patient has gained back her normal weight, has had a negative sputum, a normal blood count and sedimentation rate since.

The last surgical procedure was done on November 18, 1938.

We must visualize that fundamentally and basically the physician is the foundation of all tuberculosis work. — CHESLEY BUSH, M. D.

Finding people with tuberculosis is the primary responsibility of all agencies engaged in ridding the human race of this devastating disease.—EZRA BRIDGE, M. D., *Amer. Rev. of Tuber.*, Aug., 1940.

Tuberculosis, during and after the World War, has cost approximately \$960,000,000 to date in compensation, vocational training, insurance and hospitalization. The moist rale, which was the criterion of fitness for the World War, is shown by experience, much of which has accumulated since that time, to be much less reliable than radiography in situations analogous to the examination of recruits. A huge amount of compensation has been paid out to men manifestly tuberculous at the time they were sent to camp who should have been rejected by the local draft boards, but were not.

It has been estimated that 5 to 8 per cent of all pelvic inflammatory disease is due to tuberculous involvement of the organs. This should not be overlooked in differential diagnosis.—A. H. LAHMANN, M. D., and S. F. SCHWARTZ, M. D., *Amer. Jour. Obst. and Gyn.*, Sept., 1940.

An application for compensation filed by a nurse alleging that she had contracted pulmonary tuberculosis while employed in the tuberculosis department of a hospital was recently allowed by the Ohio State Industrial commission on the ground that the claimant's disability was the result of compensable occupational diseases contracted in the course of her employment. — *Ed. Ohio State Med. Jour.*, Nov., 1940.

Abrupt climatic changes may bring to the fore latent disease such as tuberculosis, arthritis, heart disease and respiratory infections. Such changes also tend to lower general resistance to acute infections.—CHARLES SINGER, M. D., *Jour. Amer. Med. Assn.*, Oct. 26, 1940.

The President's Page

To the Members of the Maine Medical Association:

After five years of membership in the official family of the State Association I am learning a few things about the family in general. It is a family to be proud of all right. And if I have discovered a weakness here and there, it has been a minor weakness which gentle medicine, understanding and patience would correct. I have, on the other hand, found in many places strength and energy.

My experience through the five years has convinced me that we have grown in strength and effectiveness. And it has convinced me furthermore that we should cherish our past accomplishments and bind ourselves closely together to solve the plans and problems which lie ahead. We are fortunate in having strong County Societies in most every section of the State. The recent union of Lincoln and Sagadahoc is an example of the coöperation and interest which our members show in supporting a proposal which promises to enrich their meetings. We have energetic and loyal county officers who arrange interesting meetings, make good records, and keep the affairs of the society in order. The usefulness of our organized efforts depends fundamentally on the vigor of our County Societies. If I have learned any one thing in five years, I have learned that our County Societies and County Secretaries make or break the organization.

And supporting our County groups every day in the year is the Secretary of our State Society and his assistant. Doctor Carter is a tower of strength at all times. His labors in behalf of the Association have been manifold. Every week he has visited the office in Portland, once or twice, in order to keep the correspondence up to the minute and to steer Mrs. Kennard over any troubled waters. He has attended to the numerous details of JOURNAL advertising, and set-up. Together with Mrs. Kennard he has addressed the JOURNALS, verified reports, paid our bills and kept all County Secretaries informed about organization affairs. And Mrs. Kennard has been an incomparable assistant. The fortunes of the Association and the JOURNAL are uppermost in her mind morning, noon, and night. Her practical experience over the years and her loyalty to the physicians of Maine have made her invaluable. The work in the office increases and will continue to increase, I believe. We will never need a smaller group to keep the Association at its present level. I wonder if we may not need a larger staff as the years pass. I have allowed myself to dream of a time when we will have a home of our own, a building belonging to the Maine Medical Association.

The last five years have been pleasant ones for me. I have learned many lessons and gained respect and admiration for the men who belong to the State Association. As I approach the end of my official tour of service I respectfully ask every member to take an active interest in the Association, speak his mind at meetings, present his complaints for discussion, fight the good fight, and whole-heartedly support organized medicine.

THOMAS A. FOSTER, M. D.,
President, Maine Medical Association.

Editorial

Local Selective Service Examiners

One of the most important contributions that the medical profession has made to further and better the measures of National Defense is the examination of draftees preliminary to final selection by the various induction boards. That mistakes would be made was to be expected. The work is new to many of the examiners, perhaps they failed to grasp the exacting demands required of men for unlimited military service but it is an important fact, seemingly overlooked by critics of the local board men, that the government with its usual consistency for being inconsistent in many things is asking the local selective service examiner to function in a capacity seemingly impossible if the best results are to be obtained. Specific reference is made to the fact that the local examiner must cover in his work, if he is to be reasonably successful, an examination that embraces many of the important specialties in medicine. As the *Journal of the A. M. A.* states in an editorial on November 2, 1940, *induction examinations will be made by a group of specialists who will be given the necessary facilities and time for study much more comprehensive than CAN be made by either the local examiner or the medical advisory board.*

Abusive criticism of local examiners can do nothing but defeat the purpose of their selection and cause a natural resentment, not only on the part of the examiners, but by men they have accepted in good faith and who have been rejected by the induction board. Constructive criticism by those competent and in a position to give it is usually welcomed by any fair minded and intelligent examiner but he naturally objects when certain army officials seem to lack that common decency that should be afforded men who are honestly doing their best and with no cost to the government. Naturally it was very gratifying to the individual examiners to receive a letter of commendation from the Medical

Adviser of the Selective Service in Maine which is in direct contrast to the attitude of some army officials.

When the public attention is drawn to the alleged incompetency of selective service examiners in flaming headlines, obviously with the approval of the officers quoted, it must be remembered that so far the supply of Class A men seems unlimited and that the army is well within its rights in selecting only the very best men who come before the induction boards. As for these same captious critics who are so troubled about the unnecessary expense and delay, attributed to the incompetent work of local board examiners, one might pointedly ask them, and we do, IF ALL IS WELL with their own jobs?

If reports from seemingly fair and competent sources are correct the army critics of civilian examiners might find, if they cared to, that *millions* of extra expense will incur to the government to make fit many of the camps selected and planned for; that some of the camps are in localities that might not meet with the approval of men who appreciate the requirements of an army camp from ALL ANGLES and it can be asked what, if anything, is being done by those in authority to control the menace of prostitution in close proximity to army cantonments?

The silly and unfair statement—on record—that the average examination given enrollees consumes only some four minutes is mentioned to show the length an unfair commentator will go. The average examiner is honest and he is fairly competent. If such is not the case then it certainly reflects on the intelligence of the authorities who selected or recommended them individually or collectively. It also can well be said if some of the men who have been rejected by some of the induction boards had their cases reviewed there might be a reversal of opinion in no few cases.

The Eighty-ninth Annual Session

The annual session of the Maine Medical Association will be held at the Marshall House at York Harbor, Sunday, Monday and Tuesday, June 22, 23 and 24. The Marshall House overlooking the harbor is one of the finest ocean resorts in Maine. Invigorating air combined with everything for ones comfort at the hotel makes it an ideal place for rest and enjoyment.

Sunday evening we are planning to have a guest speaker who has recently come from England and the scenes of war activity. It will be interesting to hear first hand information of the conditions in Europe. Monday and Tuesday morning the system of conferences will be continued. Monday and Tuesday afternoon we will present guest speakers, the majority of whom are from out of state. Monday evening a reception in honor

of the president of the Association and his wife, Dr. and Mrs. Thomas A. Foster, will be held. The popular dinner-dance will follow this reception closing with the presentation of the Fifty Year medals. Tuesday evening the annual banquet of the Association will be held.

The committee has given due consideration to the entertainment for the ladies and they may feel assured much will be planned for their pleasure.

Your committee is deeply appreciative of the splendid response from all who have helped with this program. The last meeting at the Marshall House was one of the Association's largest. Let's try to beat that record!

HERBERT C. SCRIBNER, M. D.,
Chairman, Scientific Committee.

The Women's Field Army of Maine

For the fifth successive year the Women's Field Army of Maine starts on its annual April campaign for the \$25,000 quota needed to carry on the work of Cancer Control in Maine.

The Women's Field Army does its work only with the clinics approved by the Maine Medical Association and holds contracts with six hospitals in the State, namely, the Central Maine General Hospital and St. Marie's General Hospital in Lewiston, The Thayer and Sisters' Hospitals in Waterville, the Maine General Hospital in Portland and the Eastern Maine General Hospital in Bangor.

Each Hospital agrees to admit all patients whom the Cancer committee deems in need of treatment. Through the coöperation of physicians and hospitals with the Women's Field Army, all citizens receive treatment irrespective of ability to pay.

In view of the fact that these physicians who are members of the clinic staffs give their valuable time to the work, I feel, and express the opinion of many officers and workers in the Field Army, that these women who help to conduct the campaign in its house-to-

house canvass would feel greatly encouraged if they knew that every single doctor in Maine stood behind this work. It would be a source of great encouragement to the Field Army if physicians would become subscribers to the work and all are urged to do so.

The sum of \$13,996 was furnished by the Women's Field Army during the past year to assist patients in need of financial help. Thus were 286 patients helped. Every county was represented in this all-out aid to needy patients.

Perhaps only the Women's Field Army can thoroughly appreciate the valuable service rendered by the Executive Committee and Board of Directors, which incurs many miles of travel and much personal sacrifice, all in the interests of the Cancer Control work. The outstanding success of the work in Maine may be accredited not to the individual alone, but to all forces working in close harmony and striving to attain the common goal: REDUCTION OF CANCER MORTALITY.

MRS. HAROLD COOPER,
State Commander.

County News and Notes

100% Paid-Up Membership for 1941

Piscataquis County Medical Society, N. H. Nickerson, M. D., Greenville, Secretary.

Lincoln-Sagadahoc County Medical Society, Jacob Smith, M. D., Bath, Secretary.

Franklin County Medical Society, Lorrimer M. Schmidt, M. D., Strong, Secretary.

Cumberland

Portland Medical Club

The regular monthly meeting of the Portland Medical Club was held at the Columbia Hotel, March 4, 1941, at 8.15 P. M. The President, Dr. M. C. Webber, presided. There was a large attendance, 53 members and 3 guests being present.

Resolutions on the death of Dr. Frank Wilson Lamb and on the death of Dr. Timothy J. O'Sullivan were read and adopted by the Club.

The paper of the evening was by Dr. W. E. Tobie, who chose the title *A Colorful Character*. He spoke concerning the life and work of Dr. Stanley P. Warren, a Portland physician, who died in October, 1936, at the age of ninety years.

Respectfully submitted,

ALICE WHITTIER, M. D.,
Secretary.

Kennebec

A meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital, Gardiner, Maine, Thursday, March 20, 1941.

Clinical Session at 5 P. M., which was presided over by I. E. McLaughlin, M. D., President:

(1) Plastic Repair of Thumb—M. E. Joss, M. D.

(2) Pneumococcic Meningitis of Otitic Origin—Allan Hurd, M. D.

(3) A Case of Aplastic Anemia—C. R. McLaughlin, M. D.

(4) Diabetes Mellitus with Multiple Infection and Coma—Harry Almond, M. D.

(5) Tumor of Hypophysis—C. G. Farrell, M. D.

(6) Retroversion of Uterus Complicating Pregnancy—F. B. Bull, M. D.

(7) Subacute Bacterial Endocarditis—I. E. McLaughlin, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

Everett F. Conlogue, M. D., Fairfield, Maine, was admitted to membership.

The speaker of the evening was Charles E. Ayers, M. D., Chief of Orthopedic Service, Worcester General Hospital, Worcester, Mass. The title of his address was: *The Relation of Trauma to Rupture of Nucleus of Corpus Pulposus*. Dr. Ayers illustrated his talk with slides of X-rays taken of infected parts of the spinal column of several cases within his own experiences.

There were 30 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Knox

A meeting of the Knox County Medical Society held at The Copper Kettle, Rockland, March 11, 1941, was called to order by Dr. Charles B. Poplestone, President.

Dr. Paul A. Jones of Union was reported passed by the censors and was taken into the Medical Society as a member. The application of Dr. Wesley Wasgatt for membership was read and referred to the censors.

Dr. Whitney of the Boston Dispensary was the guest speaker of the evening, and gave a very interesting and instructive talk on *Rectal Diseases and Their Diagnosis*.

A. J. FULLER, M. D.,
Secretary.

Penobscot

The Penobscot County Medical Association held its monthly meeting, March 18, 1941, at the Bangor House, Bangor.

Following the showing of a Motion Picture on *Human Fertility*, the address of the evening was given by Dr. Frederick Martin, Director of Speech Clinics, Rhode Island College of Education, on the subject of *Prevention and Correction of Speech Defects*.

FORREST B. AMES, M. D.,
Secretary.

New Members

Kennebec

Everett F. Conlogue, M. D., Fairfield, Maine.

Knox

Paul A. Jones, M. D., Union, Maine.

York

William B. O'Sullivan, M. D., Biddeford, Maine.
L. Dean Webber, M. D., Kittery, Maine.

Special Notices

Coming Meetings

National Medical Societies

American Medical Association

Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

Annual Meeting—Cleveland, June 2-6, 1941.

State Medical Societies

Connecticut State Medical Society

Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Bridgeport, May 21-22, 1941.

Maine Medical Association

Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—York Harbor, June 22-24, 1941.

Massachusetts Medical Society

Robert N. Nye, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1941.

New Hampshire Medical Society

C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 13-14, 1941.

Rhode Island Medical Society

Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Newport, May 28-29, 1941.

Vermont State Medical Society

Benjamin F. Cook, M. D., 154 Bellevue Avenue, Rutland, Secretary.

Annual Meeting—Burlington, October, 1941.

County Medical Societies

Cumberland

Cumberland County Medical Association

Eugene E. O'Donnell, M. D., Portland, Secretary.

Friday, April 25, 1941, 7.00 P. M.

The Eastland Hotel, Portland, Maine.

Speaker, Dr. Edward B. Benedict.

Subject, *Gastroscopy*.

Association Delegates to 1941

Annual Sessions

American Medical Association

William A. Ellingwood, M. D., Rockland.

Connecticut State Medical Society

Wedgewood P. Webber, M. D., Lewiston.

Massachusetts Medical Society

Theodore E. Hardy, M. D., Waterville.

New Hampshire Medical Society

William T. Rowe, M. D., Rumford.

Rhode Island Medical Society

M. A. Torrey, M. D., Ellsworth.

V. D. Clinic Statistics

July 1, 1939, to June 30, 1940

Maine General Hospital and Maine Eye & Ear Infirmary, Portland

Number of visits to the clinics:

Month	M. G. H.		M. E. & E.	
	M.	F.	M.	F.
July,	100	53	172	261
August,	138	64	206	277
September,	142	62	190	234
October,	93	43	175	240
November,	134	78	183	295
December,	137	92	172	274
January,	122	101	207	275
February,	127	94	181	255
March,	136	74	170	261
April,	117	79	201	257
May,	137	90	201	258
June,	125	72	194	256
Totals,	1,508	902	2,252	3,143

Grand total: 7,805 visits during the year.

Divisions of patients according to marital state:

Married,	217
Widowed,	25
Single,	108
Divorced,	24
Total,	374

Division of patients according to stage of disease:

Primary,	4
Secondary,	12
Tertiary,	280
Congenital,	78
Total,	374

Patients with C. N. S. involvement, 63

Patients with optic atrophy, 4

Classification of patients according to nationality:

American,	285
French,	36
Italian,	19
Canadian,	5
Irish,	3
Armenian,	2
Norwegian,	2
Polish,	2
Portuguese,	2
Swedish,	2
Danish,	1
Greek,	1
Indian,	1
Scotch,	1
Syrian,	1
Negro,	11
Total,	374

Classification of patients according to occupation:

Home and housework,	135
Labor,	61
Children,	48
Food handling,	20
Driving,	16
Office,	14
W. P. A.,	12
Mechanic, electrician,	10
Outdoor,	8
Painter,	7
Janitor,	2
Unknown or none,	35
Miscellaneous,	6*

Total, 374

* Includes a barber, basket-weaver, horse-trainer, junk-dealer, messenger and showgirl.

Congenital cases—age at which disease was diagnosed:

Under 2 years,	19
2-5 years,	13
6-10 years,	11
11-15 years,	9
16-20 years,	13
Over 21 years,	13

Total, 78

Congenital cases—symptom through which disease was discovered:

Family history,	19
Eye trouble,	27*
Arrested development,	9
Routine blood test,	7
Lesion or rash,	6
Snuffles,	4
Pains in legs,	2
Fatigue, etc.,	1
Miscarriages,	1
Teeth,	1
Throat trouble,	1

Total, 78

* Includes 19 cases of interstitial keratitis.

Staff Meetings — Thayer Hospital, Waterville, Maine

Staff meetings are held every Thursday evening at 7.30 at the Thayer Hospital, except for the third Thursdays from September to May inclusive, when they are omitted because of the meeting of the Kennebec County Medical Association. The Profession is cordially invited to attend these meetings. In addition to clinical case studies, special features are included in certain of the programs, such as panel discussions, guest speakers, etc.

On May first, Dr. Arnold P. Meiklejohn of the Thorndike Memorial Laboratories, Boston City Hospital, will speak on "Vitamin Therapy."

On May twenty-second, Dr. Samuel A. Levine, Boston, will speak on "Some Important Errors in Cardiac Diagnosis."

Insofar as possible, advance notice of these special features will be given in the JOURNAL.

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.
2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.
3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.
4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.
5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.
6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.
7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

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Rules Governing the Award of "The Foundation Prize" of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons

(1) "The award which shall be known as 'The Foundation Prize' shall consist of \$150.00."

(2) "Eligible contestants shall include only (a) interns, residents, or graduate students in Obstetrics, Gynecology or Abdominal Surgery, and (b) physicians (with an M. D. degree) who are actively practicing or teaching Obstetrics, Gynecology or Abdominal surgery."

(3) "Manuscripts must be presented under a nom-de-plume, which shall in no way indicate the author's identity, to the Secretary of the Association together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant."

(4) "Manuscripts must be limited to 5,000 words, and must be typewritten in double-spacing on one side of the sheet. Ample margins should be provided. Illustrations should be limited to such as are required for a clear exposition of the thesis."

(5) "The successful thesis shall become the property of the Association, but this provision shall in no way interfere with publication of the communication in the JOURNAL of the Author's choice. Unsuccessful contributions will be returned promptly to their authors."

(6) "Three copies of all manuscripts and illustrations entered in a given year must be in the hands of the Secretary before June 1st."

(7) "The award will be made at the Annual Meetings of the Association, at which time the successful contestant must appear in person to present his contribution as a part of the regular scientific program, in conformity with the rules of the Association. The successful contestant must meet all expenses incident to this presentation."

(8) "The President of the Association shall annually appoint a Committee on Award, which, under its own regulations shall determine the successful contestant and shall inform the Secretary of his name and address at least two weeks before the annual meeting."

JAS. R. BLOSS, M. D., *Secretary*,
418 Eleventh Street,
Huntington, W. Va.

Book Review

"Manual of Clinical Chemistry"

By: Miriam Reiner, M. Sc., Assistant Chemist to The Mount Sinai Hospital, New York.

Published by Interscience Publishers, Inc., New York, 1941. Price, \$3.00.

This little book is an enlarged form of directions for the use of interns and laboratory technicians working in the biochemical laboratory of the Mount Sinai Hospital. The manual is meant to give at least one method for taking care of every normally expected contingency. The methods selected are those which promise to give greatest accuracy with greatest simplicity.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

*Silver Picrate, is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.



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The Journal of the Maine Medical Association

Volume Thirty-two

Portland, Maine, May, 1941

No. 5

*What Is Wrong with the Teaching of Materia Medica in Medical Schools?**

By ADAM P. LEIGHTON, M. D., Portland, Maine.

For twenty-six years I have been privileged to be a member of the Maine Board of Registration of Medicine. It has been most interesting work and to me a source of great pride to realize that we in Maine, perhaps, had kept in line with other Boards in maintaining high standards and accepting for examination only graduates of Class "A" accredited Medical Schools. I am certain that we have given comprehensive, fair and practical examinations in all these years, and that, at least, we were able to determine satisfactorily those who were truly and properly fitted to practice in our state. I am ashamed to say that in the long time that our Board has been affiliated with this Federation, Maine has been represented at these meetings but once in the last twenty-five years, and it was I who then attended. With the presentation of this brief dissertation I offer my apology in advance for any sarcasm or captious remark which creeps in. It will be "Leigh-tonesque," at least.

Oftentimes I have been asked if the medical graduates of today are better prepared and equipped for practice than those of twen-

ty or thirty years ago. I have always answered in the affirmative. It seems silly to ask such a question, for obviously our medical schools are turning out men with scientific knowledge and training far superior to that which we received in our day. The advances and discoveries made in medicine, in the past quarter of a century, have been phenomenal. When I graduated we were just learning the theory and technique of the Wasserman reaction and the opsonic theory and index was first in evidence, as was the beginning of the use of vaccines. We knew little of endocrinology;—radium therapy was unknown and it was to be twenty years before we would learn of insulin. Surgical knowledge and technique in those days was indeed limited in comparison to the great opportunities offered the young medical men of today.

We most certainly will all agree that the Doctor of Medicine who graduates today is a better man in theory, at least, than was he who came into the field shortly after the turn of the Century. It is axiomatic. I believe, however, that the present day graduate lacks

* Read at the Annual Meeting of The Federation of State Medical Boards and The Council on Medical Education in Chicago, February 17, 18, 1941.

much of the practical knowledge that was ours, especially in consideration of the administration of drugs and medicines as therapeutic agencies. I know this now to be a fact. Egotistical as it may be and sound, I state that when I graduated in medicine the men who came from my school knew *Materia Medica* and its therapeutic application. We could write a prescription correctly and in proper Latin form, and we knew that there was such a thing as a National Formulary and the U. S. Pharmacopeia. That is *more* than I can say for the schools of today. After having received two years of real teaching in *Materia Medica* and a year of drilling in prescription writing, I submit that we were able to practice common sense medicine and make use of official preparations and products, which, after all, I contend, constitute the "stock-in-trade" of a Doctor of Medicine.

Two years ago the Maine Medical and the Maine Pharmaceutical Association commenced the exchange of delegates to their respective annual meetings. I have been privileged to be the medical delegate, and it has been a pleasure and a revelation indeed to mingle with the druggists in scientific session. Parenthetically, may I state that I think it is about time the medical and pharmaceutical brethren fraternized and met together for consideration of the many professional matters with which we are so closely concerned. There are no two organizations in science so closely allied as are the Medical and Pharmaceutical professions, and we can learn much that is mutually profitable by meeting regularly together and discussing the many problems which today surely confront us.

At one of these meetings, two years ago, I was in conversation with one of the Maine Commissioners of Pharmacy and he asked me:—"What is the trouble with the young doctor of today? He can't write a proper prescription! Why, even the Osteopath writes a better one!" Another druggist stated to me that one of the young doctors who recently located in his town came into his store and said, "I'll have to have your help. I really don't know how to write a prescription." These remarks disturbed me, especially as I knew the young man to whom the latter gentleman referred and I remembered him as

a graduate of one of the leading medical schools.

As Secretary of our Board, for reasons which you well understand, I do not routinely take part in the actual examination of applicants. I was determined, however, to gain first hand information on this particular point and to find out for myself if such an alleged lack of training could be true.

In the last five examinations given by the Maine Board I have set the questions in *Materia Medica* and Therapeutics. I am absolutely disgusted with the results! There is no necessity to bore you with a résumé of the findings of all of these examinations,—for one was just as poor as another, but I do want to give you the questions and comment upon the answers of the examination held in November, 1940. It was an "eye-opener" to me indeed!

Question 1: a: Name eight official preparations of iron and give dosage.

b: Name six official preparations of Mercury and give dosage.

Of the eighteen men who took the examination three only were able to name two official preparations of iron, and in answer to the mercury question, two official preparations was also the total number which could be named. Curiously enough, the majority of the men gave Feosol Tablets, Hematinic Plastules and Frost's Ferroids as their answer. I don't doubt but that these are exceptional preparations, but whatever they are, they don't conform with my idea of what an official preparation might be. Nearly all did mention Bland's Pills. Of these eighteen men only one knew of Bashams Mixture, and he couldn't give its official name or its indication for use!

One man only of the eighteen had heard of Monsel's Solution. I think that this is rather strange, for to me they are important and valuable medicinal adjuncts.

Question 2: Write a prescription correctly and in Latin for a case of Chronic Bronchitis with cough, containing fluid extract of Senega, fluid extract of Squills, tincture of camphorated opium, Syrup of Tolu and water.

Not one man could do it correctly. Their attempts at Latinic endings were pathetic, and they didn't even know the doses.

Question 3: Write a prescription for La Grippe containing Acetphenetidinum, Quinine Sulphate, Camphor Monobromate, Caffeine Citrate and Codeine Sulphate.

These prescriptions were likewise "abortions," for none was written correctly, and the Latin attempts were atrocious. Three of the applicants did not even attempt to answer the questions. One prescription written called for twelve capsules, and each one contained 18 grains. If this were dispensed each capsule would be about the size of an olive, which, to my mind would not be easy of deglutition.

Question 4: Write a prescription correctly and in Latin for Rectal Suppositories to be used in a case of acute cystitis in a woman with tenesmus and frequent urination, containing morphine or opium, extract of Hyoscyamus, extract of Belladonna, with the usual cocoa-butter base.

They "took the cake!" One man even indicated the amount of oleum theobromata that he would use. If his prescription had been filled and the suppositories made, each one would have been about the size of a Seckel pear or a pullet's egg, which would have, at least, demanded anal divulsion before the lady could insert it in her rectum.

Not one man wrote the prescription correctly! The majority stated to me that they never had been taught or shown how to write a prescription calling for making of a suppository.

Question 5: Write a prescription for a quarter of an ounce of a 25% solution of argyrol to be used as a collyrium.

Only one man of the eighteen came anywhere near writing this correctly or indicating the proper amounts. I explained that argyrol was not an official preparation. One man gave as directions that it should be "rubbed on thoroughly," and, believe it or not, another gave it in teaspoonful doses!

Only three men out of the entire class knew what a collyrium was. They could not figure out the amount in grains added to two drams of distilled water—needed to give a 25% solution. And we send these fellows out of medical school as qualified!

Question 6: Give the rule for computation of the dose and state the amount of morphine that you would use hyperdermically after an appendectomy in a seven-year old child.

They all did fairly well on this.

Question 7: Name the alkaloids or glucosides from physostigma, hyoscyamus, pilocarpus, belladonna, digitalis and opium and give the dosage.

This question, too, was answered with a fair degree of accuracy. The dosage was a little off,—some mentioned the dosage in minims and grains, but on the whole it was fairly well done.

The eighth question dealt with the diuretic action of certain drugs, and this, too, met with fair success. The ninth question was to treat a case of chronic cystitis with alkaline urine and pruritis vulvae. The answers to this question were choice indeed. Five men only knew that with the use of Hexamethylenamine the urine must be acid, to obtain proper results. For the pruritis vulvae the remedial applications differed tremendously. One man applied unguentum hydrargyrum. You can imagine the result of such treatment! The lady would be relieved of her itching, but I believe other difficulties would surely ensue. Proprietary ointments were generally advised.

The tenth question was to write a prescription in the metric system for Seborrheic Eczema, containing precipitated sulphur, salicylic acid, zinc sulphate, boric acid, glycerine and camphor water. If the men had been taught the metric system in medical school, they showed no evidence of it in answering this question. Their attempt at putting together this solution was a dismal failure. The amounts indicated were either too small or too large; one applicant advised rubbing it on the head, as if this was the usual or only possible location of the pathology. Another evidently thought that the end result of com-

pounding would be an ointment, for he advised it be used as an unguent.

Fifteen out of the eighteen applicants who took this examination did not attain the passing average. The next day, after its completion several of the men came to my office and their remarks were upsetting and a little pathetic, to say the least. Each one admitted that the examination was fair but he "knew he hadn't passed it." They stated it was about what they expected, for they were not being taught *Materia Medica* and *Therapeutics* adequately or satisfactorily in their schools. I had a little pity for a few of them for I found that some had worked their way through college and medical school and were planning to go into communities in our state where they were sorely needed. One man said that certain members of his class "had complained to the Dean" of his institution as regards the teaching of these subjects, but to no avail.

Another stated that he had "never had more than a day or two of instruction in prescription writing." One other stated that his school had given him just two weeks of instruction in this subject, and that of a most cursory type.

After giving them an additional oral examination, I realized that a few really did have fair comprehension of *Pharmacology*, and with the promise that they would seek out some druggist or other suitable person and attempt to learn to write prescriptions, I passed nine of them. The other nine will have to be re-examined, for their ratings were from 17% to 50%.

What is the answer? I believe that medical schools, for the most part, are turning out a crowd of "scientists," "theorists" and "medical nihilists." Do their teachers plan that they shall supplement their collegiate instruction by a kind of post-graduate course given by the detail men or pharmaceutical representatives who haunt their offices after they start in practice.

To me this seems to be the present day scheme. I have great respect for the qualified medical or pharmaceutical graduate who comes to me, detailing and demonstrating

any real scientific medicinal product, and I am glad to greet him and give him heed. When it comes to the "sample and blotter boys" who undertake to teach us how to practice medicine, I say it is about time that we waked up and protested.

The medical profession has "put over" and made successful too many nostrums, patent medicines and low-grade proprietaries, as is evinced by the casual observation of the advertisements in the windows of almost any cut-rate perfumers' shop or department store, as well as of the cut-rate drugstore.

I had occasion a few weeks ago to look over a druggist's prescription file of a week previous. I counted 51 so-called prescriptions before I came across one that was written correctly or scientifically, and which called for official drugs and medicines in its compounding. There are many most excellent proprietary preparations on the market, but most of them have a short, catchy, or coined name, which makes it easy for the laity to read on a prescription and remember. No wonder that "counter-prescribing" is on the increase and no wonder, too, that the patient passes the name of the medicine about the neighborhood and amongst his friends as being recommended and prescribed by his doctor.

To speak vulgarly and in a slangy manner, I say that the members of the Medical profession are, and have been a crowd of "suckers", indeed, that in these latter years they have been wont to cast aside their knowledge of *Materia Medica* and then begin to write prescriptions too generally and promiscuously for the myriad of proprietary pharmaceutical preparations which are almost daily detailed to us.

The medical student should have it emphatically stated to him that *Materia Medica* is still being taught and that it is one of the most important subjects of the medical school curriculum. He should be given a course of adequate instruction during his medical study which would guarantee that he was properly schooled in his *Materia Medica*, which I like to call the "backbone of medicine," before he attempts to obtain licensure.

Acute Intestinal Obstructions*

Empyema*

By JOHN HOMANS, M. D., Boston, Massachusetts

Acute Intestinal Obstructions*

It would hardly be possible to deal with the numerous causes of intestinal obstruction; and most will agree that obstruction by bands following previous operation, especially appendicitis, and obstructions due to strangulated hernia are the most common forms. It is not proposed to speak of congenital obstructions which are, for the most part, malformations. Obstructions other than those due to bands and strangulated hernia are freakish, unusual, and difficult to diagnose, but it should be recalled that both acute pancreatitis and mesenteric thrombosis give a very good imitation of intestinal obstruction. There recently appeared in the April 11th issue of the *New England Journal of Medicine* an excellent discussion of acute mechanical obstruction based, especially, on a series of cases at the Massachusetts General Hospital, during the last fifteen years. This is offered by McKittrick and Sarris.† It may be said that their conclusions are based upon distinctly modern methods. Of course, the Miller-Abbott tube only came in during the last three years. However, a less effective drainage of the upper bowel was in use before that time, in the form of the Wangenstein suction-syphonage.

It is generally admitted that whatever treatment is used for acute intestinal obstruction, an estimate must be made, in all cases, of the degree of dehydration and chemical imbalance, especially the loss of electrolyte (sodium) and chlorides. The two do not necessarily run parallel, but in jejunal or ileal obstruction, the two may be considered the same. Thus, the question really

is: Has the patient lost much fluid by vomiting, in which case normal saline must chiefly be supplied (or is the problem mainly one of starvation, when glucose solution (5%) is primarily needed? Usually, both solutions must be given. Where laboratory facilities are available, the blood chlorides (560 milligrams per cent is normal) are the guide to the need for salt administrations. The whole problem has recently been discussed by Collier and Maddock, who are pioneers in this field.

Sodium, or total base loss, is indicated indirectly by the carbon dioxide combining power of the serum. The normal is 55-56 volumes per cent. If sodium is lost in excess of chloride, the carbon dioxide combining power is lowered (inorganic acidosis). If an excess of chloride over sodium is lost, the combining power is raised and alkalosis exists.‡

The amount of dehydration and chloride loss being determined, appropriate fluid must, of course, be supplied. In some instances, especially of strangulation, blood transfusion will be required. Again, in all cases, at whatever stage the patient is seen, and whether or not operation appears demanded, drainage of the intestine by a Miller-Abbott tube is appropriate. If this can not be used, the passage of any tube, especially into the duodenum, and the establishment of suction-syphonage is likely to be very helpful.

All the above treatment is entirely appropriate in case facilities for operation are not available, or in the event that so much time has elapsed that an operation is unlikely to be advised, at all.

* From a Symposium delivered before the annual session of the Maine Medical Association, June 24, 1940, at Rangeley Lakes, Maine. Also at the Squaw Mountain Inn, July 25, 1940, before a joint meeting of the Piscataquis, Penobscot, Aroostook, Kennebec and Somerset County Medical Societies.

† Acute Mechanical Obstruction of the Small Bowel: Its Diagnosis and Treatment. *N. E. J. Med.* 222:611, April 11, 1940.

‡ Collier, F. A., and Maddock, W. G. Water and Electrolyte Balance. *Surgery, Gynecology and Obstetrics*, Volume 70, Feb. 15, 1940, pg. 340.

DIAGNOSIS

The next matter of importance is related to the diagnosis of intestinal obstruction. A history of previous appendicitis or pelvic inflammatory disease is exceedingly important. In general, pain of a colicky nature, associated with vomiting, is present. The amount and nature of distention is determined by the level of obstruction. Temperature is of no great importance, although the absence of fever favors obstruction as against a diagnosis of an acute inflammatory condition. A soft, distended abdomen, not associated with local tenderness, is, of course, in favor of obstruction. Finally, the flat X-ray plate is of great assistance. Probably, the distinction between the ladder-like markings in distended coils and a smooth outline is not nearly as important as the location of the distended coils and their relation to collapsed bowel.

TREATMENT

The First Twenty-four Hours

The treatment must vary according to the time elapsed since the onset of symptoms. As a general rule, almost never to be broken, immediate operation is indicated if a diagnosis is made within twenty-four hours of onset. At this time, the patient is seldom dehydrated, so that it will not be necessary to wait in order that the patient be prepared for operation. Measures to combat whatever dehydration does exist may be made coincidentally with the operative procedure.

A search for the point of obstruction and release of its cause are decidedly indicated at this time, in contrast with what is likely to be true later. Almost necessarily, bands can be divided and incipient strangulation can be relieved. Rupture of the bowel during the manipulation necessary to this procedure is not likely, of course. Such is not quite true, however, even four to six hours after the onset of strangulation in a hernial sac.

The Second Twenty-four Hours

During this period, immediate operation can seldom safely be performed, and then comes the question whether operation should be carried out as soon as the patient can be

made ready (relief of dehydration, release of distention by tube, etc.), or whether, following conservative and restorative procedures, absence of evidence of definite strangulation is sufficient to permit operation to be delayed. This is a decidedly debatable matter. Most surgeons feel that they are not clever enough to decide whether, after relief of distention, fluid and chemicals having been supplied, and the patient appearing less ill, there is still present strangulation which threatens life.** The conservative surgeon may well take the attitude that operation offers greater risk than continued non-operative treatment whereas the more radical surgeon thinks that now is the time to operate. In the event that operation is not carried out during the second 24 hours, the taking of abdominal films at 12 to 24 hour intervals is advised, in order to follow the amount of distention, the exact location of the lowest distended coil and the progress of the tube, provided this is used. During this period, also, frequent white cell counts and abdominal examinations for the purpose of locating any inflammatory change should be carried out.

After Forty-eight Hours

After forty-eight hours, or in the case of an elderly patient, conservative treatment should almost necessarily be used, during which time the observations already outlined should be made. If distention is not relieved, it is best not to search for the point of obstruction, for the bowel will almost necessarily be injured in so doing, and death will result. On the other hand, the operative insertion of a catheter into a coil of the distended bowel is often exceedingly satisfactory. The location of the coil may be discovered by X-ray and by inspection. A tube may be inserted after the method of Witzel. Such a procedure can be carried out under local anesthesia. If the patient is relieved by the measures outlined above, then the question comes up, whether after recovery, exploration should be made. On this point, McKittrick and Sarris offer a very interesting point of view, namely, that since in the M. G. H. series, 26% of the pa-

** Such a consideration applies only to internal obstructions and not of course to strangulated hernia.

tients had had previous attacks, the risk of exploration to relieve the cause of obstruction is probably less than that of allowing the patient to go unexplored.

MATTERS OF INTEREST IN CONNECTION WITH INTESTINAL OBSTRUCTION

It is too little realized that immediately following a recovery from appendicitis, acute intestinal obstruction is likely to occur. This is a more serious form than the sort of obstruction which so often complicates actual convalescence and which is due to the inflammatory cake. The obstruction, of course, after the individual has gone home, is due to a band which may well cause strangulation, whereas the sort which occurs during convalescence in the hospital is unlikely to be due to a single band, is apt to be relieved by starvation and intubation, and is almost certainly curable by drainage of the loop immediately above the cake.

Another matter of interest is the anesthesia. Ether has always been unsatisfactory. Because the patients are often poor risks, it is difficult to get relaxation with safety. On the whole, in well-equipped clinics, spinal anesthesia, with its perfect relaxation, is often exceedingly satisfactory. The anesthesia lasts long enough, especially with the aid of modern drugs (pontocaine). The injection of a local anesthetic, pure and simple, such as infiltration of the abdominal wall with novocaine, is very satisfactory for those who are skilled in its use. But it requires patience and if the patient is hurt, there is apt to be sudden evisceration.

Closure of the abdominal wall is a matter of great importance. It may be advisable to use through and through stitches, passing through all layers. In that case, each loop must be supported to lift up the abdominal wall while the succeeding stitches are being inserted and the individual stitches are being tied. In this manoeuvre, it will be found of great assistance, even when the patient is under general anesthesia or coming out of a spinal anesthesia, to infiltrate the region of the incision with novocaine.

*Empyema**

Empyema is first of all a complication, not a disease, per se. This is the basis for successful treatment. It will presently be explained why drainage made without keeping this in mind often results in death or the establishment of chronic empyema.

What is empyema? It is a pyogenic infection of the pleural cavity derived from the lung. When does a pleuritic effusion become empyema? When bacteria can be discovered in a smear, or when the cell count of the fluid shows 60,000 or more pus cells per cubic millimeter.

There are, pathologically and clinically, two principal sorts of empyema:

- (1) The sort which complicates lobar pneumonia, *the meta-pneumonic variety*, and
- (2) The sort which complicates diffuse pneumonic processes and generalized infection, prevailing *streptococcal*.

This latter, which is seen especially in epidemics, may be called the streptococcal variety. The distinction between these two is of great importance. Broadly speaking, meta-pneumonic empyema forms a cavity bounded by fixed lung, mediastinum, and thoracic wall, capable of being drained without especial risk to the patient; whereas, streptococcal empyema occupies a free pleural cavity, unguarded by adhesions, both lung and mediastinum being unfixed. The opening of such a cavity entails serious consequences.

META- OR POST-PNEUMONIC EMPYEMA

Some days after the subsidence of the fever of pneumonia, a fresh rise of temperature suggests that empyema is on its way. Or the second process merges with the first. In any case, recovery from pneumonia is halted and the patient appears ill. The white count remains high and the physical signs of a collection of fluid become evident. At this point, the chest is aspirated and pus may or may not be found. Failure to secure pus may be due to the pocketing of the exudate in a peculiar situation, to the use of too small a needle to carry the heavy pus, or the actual occlusion of the needle by a mass of fibrin; that is, the needle may encounter one of the great masses of fibrin so often seen in this type of

infection. It must be supposed that infection enters the pleural cavity by penetrating the pleura covering the diseased lobe or that, at one point, a softened area actually ruptures. The fact that a bronchial fistula is occasionally left after drainage and that a part of the contents of an empyema cavity may actually be coughed up by way of the mouth, accounts for this latter belief. In any case, the exudate is a heavy one, often containing great masses of fibrin, and its characteristic foul odor must be attributed to the presence of the stinking anaerobes, derived from the mouth and pharynx. It is worth remembering that, rarely, the needle may enter what might be called supernatant fluid, that is, a thin portion, separated from the heavy fibrin and pus cells, so that the exudate appears to be thin when, in fact, it is not. But here, the story of onset may point in the true direction.

TREATMENT

It is not my purpose to go into the details of drainage. The main thing is that the physician, and surgeon, should, without being too dilatory, practice a decent conservatism. Drainage is never required as an emergency, and patients don't die because drainage can't be secured for some hours, or even days, after a diagnosis is made. It may happen that a very large collection of pus, three to four quarts, embarrasses respiration, but much of the difficulty may really be due to the toxicity of the underlying pneumonia which has failed to resolve or has extended to another lobe. For a clean-cut case, open drainage, by rib resection, is the standard treatment. The very nature of the disease makes this a safe procedure. It is best that the opening should be made low in the cavity. However, too low an opening is sometimes made. That is, the diaphragm may be injured, and in some instances, if a rib is removed low in the costophrenic angle, it may happen that as the diaphragm subsequently rises, drainage is actually impeded. Whether or not an airtight dressing is used is not fundamental. The insertion of a large rubber tube, fixed by *something*—a large safety pin or a heavy sheet of rubber—or the insertion, especially in children, of an empyema spool is the main thing. Through the heavy, pus-soaked dressing, fluids drain from the cavity more easily

than air enters in from the opening, and so some negative pleural pressure is created to aid in expanding the lung.

It may happen that in a case of doubt, drainage by the closed tube method is first tried. In that case, masses of fibrin are likely to accumulate. These are usually resistant to the solvent action of even Dakin's fluid and so lead to the establishment of chronic empyema. A watch must be kept for such an event. A much more serious situation arises when drainage is established while the pneumonia is still going on. Then, collapse of the diseased lobe hinders repair and prevents re-expansion of the lung, another cause of chronic empyema. This accident is far more common in the treatment of the streptococcal form of the disease.

STREPTOCOCCAL EMPYEMA

Especially in great epidemics of influenza or other infectious disease, streptococci are likely to invade the lungs and blood stream. At other times, cases crop up sporadically. Often, the pneumonia is only a part of a generalized infection. But even when the lung is the principal seat, the problem of treatment is only a little less difficult.

The pleural exudate in the streptococcal type of infection is thin, without fibrin, and so the process is general, unrestrained by adhesions. More than this, the mediastinal partition is not stiffened by a heavy exudate as in the post-pneumonic process. Thus, if the thoracic wall is opened, the resulting pressure changes are not confined to one side, but affect both. If an opening in the chest, such as is made to drain a heavy exudate, is made here, the mediastinum is caused by respiration, to flap back and forth, disorganizing the heart's action. It is extraordinary how deeply a patient, not seemingly very ill, is upset by a rib-resection, and how quickly he dies.

In addition to such difficulties, collapse of the diseased lobe, or lobes, is very likely to occur if the thorax is opened while the pulmonary tissues are still infected and while the pneumonia is still active. As already explained, this leads to organization and solidification of the lung in its collapsed position. Normal expansion is prevented. Chronic empyema occurs.

Continued on page 127

The President's Page

To the Members of the Maine Medical Association:

As the date of our Annual Meeting draws nearer we begin to wonder as to the program, hotel accommodations, etc. In other words we begin to consider, will it be worthwhile to attend this meeting, and will it be possible for me to attend? Now to answer some of these questions. As to the program, I do not believe there is an M. D. in the State who would not enjoy and profit by it. As to the place York Harbor is a beautiful spot and The Marshall House is all you could ask for as a hotel. The exhibit gives promise of being the best we have ever had.

Important as the above-mentioned are, there is still another which I feel to be fully as important, and that is meeting the men from other parts of the State and discussing our problems with them. In this way I always gain much valuable information and I hope make many friends.

It is very important to have a large attendance at the meeting, that means it is important that *you* attend. I have always been disappointed in the number who go from Aroostook. I realize that you have to go farther and that it is difficult for many of you to leave your practices but I know if you do attend the meeting you will feel amply repaid for the effort, and will want to go again.

The society honored me by electing me as its president-elect last year and after the June meeting I am supposed to take charge of the management of the Association for the coming year. I fully realize my unfitness for this position, and for that reason would like suggestions from any M. D. in the State that he considers would in any way benefit the Maine Medical Association, or the Medical profession as a whole.

I promise you that all such suggestions will be appreciated greatly, given due consideration, and be presented to your Association Council for its opinion.

In order for our association to operate efficiently, we need the support and coöperation of every member. Consider that it is your association and that your opinions as to how it should be run are very important, but remember we have no way of knowing what those opinions are unless you tell us. We want the Association to be run by all its members, not by just a few.

I hope to see many new faces at the June meeting. I hope every member of the Association will make an honest effort to attend, and not only to attend but to take an active part in the various meetings. Your officers need your assistance, which I trust you will freely give.

Meet me at the June Session.

P. L. B. EBBETT, M. D.,
President-Elect, Maine Medical Association.

Editorials

Economic Headache

"One of the headaches of the practice of medicine has been the fact that the attending physician to an automobile accident victim has too frequently been unable to collect for his services. The same situation also has been a vital problem for hospital management. Now there *will be* some relief from an unpleasant situation." (1) Physicians and hospitals in Maine have had abundant experience in this regard hence the thought occurs; since this problem has been agreeably solved in Michigan, why not here? An agreement of like nature seems to be working very well in Wisconsin and Massachusetts, in the latter there is a separate provision for the physicians and the hospitals, but the equity and fairness of the agreement would seem to leave no reason why it cannot be adopted in Maine.

The gist of the plan and agreement is that the patient, who has been injured in an automobile accident, and it might be that those responsible for minors could do the same, and for whom an insurance company is to be responsible financially, *will sign an agreement* giving the insurance company the *right* to make separate checks covering charges for services to the hospital and physician. It is common knowledge that many cases are settled by insurance companies, the check of course being delivered direct to the injured or his or her attorney, with the result that hospitals and attending physicians come out at the little end of the proverbial horn.

The coöperation between "old line," "mutual" and "independent" insurance companies operating in Michigan and the committee from the State Medical Society has resulted in the insurance companies assisting in every way in obtaining these signatures and in the subsequent legal procedures. It must be remembered that insurance companies are not inclined to settle claims based on allegations not supported by competent medical evidence.

What really happened to a given accident victim and the probability of permanent re-

sults is information of an important nature and must be supplied by the attending physician. The old adage to strike while the iron is hot is applicable most aptly in automobile injury cases. The *Journal* of the Michigan State Medical Society comments on the fact that there should be little difficulty in obtaining this assignment from the patient while memory of the service rendered is still fresh in his mind and with such an agreement made openly the money due the physician and the hospital will not be used by the "grateful" patient to buy a new car or fur coat instead of paying the bills for services which saved him from pain, suffering and even death.

Of course there are insurance companies and insurance companies; attorneys and attorneys; claim adjusters and claim adjusters. It is very pleasant to state that we have in Maine some companies and their official representatives who do everything within their power to see that just compensation is made to physicians and hospitals for services rendered. There are some, however, whose methods and procedures are certainly capable of being decidedly improved. If the State Medical Association of Michigan, Massachusetts and Wisconsin, through their proper committee, was able to bring about such a "constructive economic advance" for their membership we in Maine can surely do no less than try to have such an agreement become operative in this state for the physicians and hospitals who have had forced on them a burden many times unfair and unjust.

The Annual Meeting: A Foreword

June 22nd, 23rd and 24th, The Marshall House, York Harbor, is the time and place of the annual meeting of the Maine Medical Association. It is not too early, far from it, for the members to set aside these three days for their attendance. The complete program will be published in the June number of the *Journal* and quite early in the winter all available space for exhibitors had been disposed of and the Secretary's office was

(1): *Journal of the Michigan State Medical Society*. February, 1941.

puzzled how to obtain sufficient room for applications on file.

No matter what your interest is in the field of medicine you will profit by the excellent symposiums and presentations provided by the scientific Committee and Symposium Chairmen. The business side of medicine is an important feature these days and times and it is at the annual meeting that the work must be allocated and planned for the coming year. While the *Journal* prints annually the

various committee reports, as submitted by the various chairmen, many times they far from inform the membership of the great amount of important work that has been accomplished. Such accomplishments were obtained by hard work and while it is the custom in the House of Delegates to routinely accept these reports no one knows better than your executive officers of the debt of the Association to these faithful members.

Announcing the 1941 Early Diagnosis Campaign for the Prevention of Tuberculosis

The Early Diagnosis Campaign opened its fourteenth annual educational program the first week in April. Sponsored nationally by the National Tuberculosis Association and its 2,000 or more affiliated organizations, it places emphasis on PREVENTION. By the use of public informational resources it draws the attention of the people to the factors that lay behind preventing Tuberculosis, the necessity of early diagnosis, and the use of medical aids which have been invented or discovered to assist the physician in making a correct diagnosis when the disease is in an early stage. The slogan for the Campaign this year is, "A Good X-ray is Your Doctor's Best Aid in Discovering Early Tuberculosis."

The National Tuberculosis Association reinforces through its contact with National Life Insurance and Broadcasting Companies, the Press, and Popular, Trade and Professional Magazines, the message of this year's Campaign. Of the four health pamphlets especially prepared for this year's Campaign, two entitled "Spots" and "How I Escaped Death," are for the use of pay envelopes. One for use of young people in schools and colleges carries a short pertinent message entitled "Learn and Live." The message for community leaders is stressed in the pamphlet entitled "Let Us Look At Facts." Posters reinforce the message of the Slogan. The Maine Public Health Association and its 19 local associations with the coöperation of the District Health Officers from the Bureau of Health, Maine Broadcasting Companies, State Department of Agriculture, Moving

Picture Companies, Industries, Women's Clubs, Farm Bureaus, the Press, Maine Medical Association, Clergymen, and public spirited citizens make up the group which sponsor this educational effort and assist in carrying out Maine's part in the program.

A local slant is given to the Maine Campaign through the distribution of 75,000 bottle caps to milk dealers who use them in the first week of the Campaign. These bottle caps carry the double-barred cross, the slogan and name of the sponsor, The Maine Public Health Association. To interest our high school boys and girls, three prizes and three Honorable Mentions are offered by the Maine Public Health Association for the six best slogans submitted. Pamphlet distribution to industries and individuals amounts to 62,000 and 4,000 posters publicize the Campaign. To a selected group of Maine physicians pamphlets entitled "Chest X-ray Interpretation" by J. Burns Amberson, M. D., First Vice President of the National Tuberculosis Association, have been sent with the monthly copy of the Tuberculosis Abstract. By the use of these methods this year our State Early Diagnosis Chairman, E. D. Merrill, M. D., of Dover-Foxcroft, is bringing this message of the Early Diagnosis Campaign for the Prevention of Tuberculosis.

Can we eradicate Tuberculosis by 1960? If we do, education will play a prominent part. We have competent physicians and medical aids for diagnosis. Our people must be taught the necessity of using these tools.

County News and Notes

100% Paid-Up Membership for 1941

Franklin County Medical Society
 Knox County Medical Society
 Lincoln-Sagadahoc County Medical Society
 Oxford County Medical Society
 Penobscot County Medical Society
 Piscataquis County Medical Society
 Somerset County Medical Society
 Waldo County Medical Society
 Washington County Medical Society
 York County Medical Society

Cumberland

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, April 1, 1941, at 8.15 P. M., with Dr. M. C. Webber, presiding. There were 35 members and one guest present.

The Scientific Program consisted of a Symposium on *Lesions of the Stomach and Duodenum*, conducted by Dr. E. R. Blaisdell. Dr. Blaisdell presented case findings and Dr. Jack Spencer showed and explained the X-rays on these cases. Dr. G. A. Tibbetts spoke on *Acute Surgical Emergencies* and Dr. I. M. Webber on *Gastric Resection*.

Following the meeting light refreshments were enjoyed.

Respectfully submitted,

ALICE WHITTIER, *Secretary*.

Kennebec

A meeting of the Kennebec County Medical Association was held at the Augusta General Hospital, Augusta, Maine, Thursday, April 17, 1941.

Clinical Session at 5 P. M., with the following program:

1. A case of essential hypertension—Napoleon Gingras, M. D.
2. Perforated gastric ulcer simulating acute appendicitis—V. T. Lathbury, M. D.
3. Two cases of perforated gastric ulcers—Thomas F. Fay, M. D.
4. Eroding gastric ulcer with sub-serous hematoma—A. J. Gingras, M. D.
5. Perforated gastric ulcer—L. D. Herring, M. D.
6. Two cases of perforating gastric ulcers—J. G. Metzgar, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

The application of William A. Ventimiglia, M. D., of Togus, Maine, was received and referred to the Council.

The speaker of the evening was Donald Munro, M. D., visiting Neuro-surgeon to the Boston City

Hospital, whose subject was *Immediate Treatment of Head Injuries*. This paper was based on the speaker's own experience of over ten years' duration with many cases.

There were 50 members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Knox

A meeting of the Knox County Medical Association held at the Copper Kettle, Rockland, Maine, Tuesday, April 8th, was called to order by Frederick Dennison, M. D., Vice-President. Minutes of the last meeting were read and approved.

Wesley Wasgatt, M. D., of Rockland was admitted to membership.

Catherine Andrews, M. D., of Boston, guest speaker, told about *Gastric Cancer*. Her talk and the discussions which followed were very interesting, enjoyable, and instructive.

It was voted one of the best evenings of the series.

A. J. FULLER, M. D.,
Secretary.

York

The quarterly meeting of the York County Medical Association was held in Sanford, Maine, Wednesday, April 2nd, starting with a social gathering at the home of Stephen A. Cobb, M. D., at 5.00 P. M., and followed by dinner and meeting at the Henrietta Goodall Hospital at 6.30 P. M.

The meeting was opened with the reading of the minutes which were approved.

Doctor Hill invited the Society to his cottage at Biddeford Pool in August. It will be at this time that George R. Love, M. D., of Saco, will be the guest of honor due to his many years of successful practice.

The program, a *Panel Discussion on Endocrine Dysfunction*, was in charge of James Carswell, M. D., of Camden, assisted by Paul Jones, M. D., of Union and Howard L. Apollonio, M. D., of Camden.

There were 21 members and guests present.

C. W. KINGHORN, M. D.,
Secretary.

New Members

Androscoggin

J. Emile Poulin, M. D., 198 Lisbon Street, Lewiston, Maine.

Knox

Wesley Wasgatt, M. D., Talbot Avenue, Rockland, Maine.

Somerset

Harvey F. Doe., M. D., Fairfield, Maine.

Waldo

John A. Caswell, M. D., Belfast, Maine.

Special Notices

Coming Meetings

National Medical Societies

American Medical Association

Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

Annual Meeting—Cleveland, June 2-6, 1941.

American Association for the Study of Goiter

W. Blair Mosser, M. D., Kane, Pennsylvania. Corresponding Secretary.

Meeting—Hotel Statler, Boston, Massachusetts, May 12th, 13th and 14th, 1941.

State Medical Societies

Connecticut State Medical Society

Creighton Barker, M. D., 258 Church Street, New Haven, Secretary.

Annual Meeting—Bridgeport, May 21-22, 1941.

Maine Medical Association

Frederick R. Carter, M. D., 22 Arsenal Street, Portland, Secretary.

Annual Meeting—York Harbor, June 22-24, 1941.

Massachusetts Medical Society

Robert N. Nye, M. D., 8 The Fenway, Boston, Secretary.

Annual Meeting—Boston, May 21-22, 1941.

New Hampshire Medical Society

C. R. Metcalf, M. D., 5 S. State Street, Concord, Secretary.

Annual Meeting—Manchester, May 13-14, 1941.

Rhode Island Medical Society

Guy W. Wells, M. D., 124 Waterman Street, Providence, Secretary.

Annual Meeting—Newport, May 28-29, 1941.

Vermont State Medical Society

Benjamin F. Cook, M. D., 154 Bellevue Avenue, Rutland, Secretary.

Annual Meeting—Burlington, October, 1941.

County Medical Societies

Kennebec County Medical Association

Frederick R. Carter, M. D., Augusta, Secretary.

Thursday, May 15, 1941.

Veterans' Administration, Togus, Maine.

Speaker, Dr. William E. Brown, Clinical Professor of Surgery at Tufts Medical School.

Subject: *Infections of the Hand.*

Association Delegates to 1941 Annual Sessions

American Medical Association

William A. Ellingwood, M. D., Rockland.

Connecticut State Medical Society

Eugene E. O'Donnell, M. D., Portland.

Massachusetts Medical Society

Theodore E. Hardy, M. D., Waterville.

New Hampshire Medical Society

William T. Rowe, M. D., Rumford.

Rhode Island Medical Society

M. A. Torrey, M. D., Ellsworth.

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.
2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.
3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.
4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.
5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.
6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.
7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

Staff Meetings — Thayer Hospital, Waterville, Maine

Staff meetings are held every Thursday evening at 7.30 at the Thayer Hospital, except for the third Thursdays from September to May inclusive, when they are omitted because of the meeting of the Kennebec County Medical Association. The Profession is cordially invited to attend these meetings. In addition to clinical case studies, special features are included in certain of the programs, such as panel discussions, guest speakers, etc.

On May twenty-second, Dr. Samuel A. Levine, Boston, will speak on "Some Important Errors in Cardiac Diagnosis."

Insofar as possible, advance notice of these special features will be given in the JOURNAL.

State of Maine Board of Registration of Medicine

Adam P. Leighton, M. D., Portland, Secretary.

Physicians who passed examinations, March 11 and 12, 1941:

Hilton H. Applin, M. D., Central Maine General Hospital, Lewiston, Maine.

N. K. Basile, M. D., Hotel-Dieu Hospital, Montreal, P. Q.

Philip G. Good, M. D., New Haven Hospital, New Haven, Connecticut.

Rudolf Haas, M. D., 300 Main Street, Lewiston, Maine.

Oram R. Lawry, M. D., 22 Arsenal Street, Portland, Maine.

Eugene B. McGregor, M. D., 22 Arsenal Street, Portland, Maine.

Howard H. Milliken, M. D., Central Maine General Hospital, Lewiston, Maine.

Howard C. Pritham, M. D., Waltham Hospital, Waltham, Massachusetts.

William M. Redman, M. D., 31 Powel Avenue, Newport, Rhode Island.

Isidore J. Schwartz, M. D., 1131 North 41st Street, Philadelphia, Pennsylvania.

Hans Weisz, M. D., Community Hospital, Rumford, Maine.

Edward M. Ohaneson, M. D., 156 Cumberland Avenue, Portland, Maine.

Paul C. Laporte, M. D., Edmundston, New Brunswick, Canada.

Through Reciprocity

Donald E. Bowen, M. D., The Brown Company, Berlin, New Hampshire.

Walter Newman, M. D., Washington Hospital, Washington, Pennsylvania.

Edward Sheehan O'Meara, M. D., Ellsworth, Maine.

Robert Cumming, M. D., 37 South Maple Street, Akron, Ohio.

Harold A. Johnson, M. D., 205 French Street, Bangor, Maine.

Romeo J. Lajoie, M. D., Dewitt Hotel, Lewiston, Maine.

A. M. G. A. Golf Tournament

The American Medical Golfing Association's Twenty-Seventh Annual Tournament will be held at Cleveland Country Club-Pepper Pike Club, Cleveland, Ohio, Monday, June 2, 1941. Two famous championship courses and a beautiful clubhouse await the nation's medical golfers in Cleveland on the occasion of the A. M. A. Convention.

Some 250 of the 1,413 Fellows of the A. M. G. A. are expected to take part in this 36-hole competition. Each contestant will play both courses. The hours for teeing off are from 7.30 A. M. to 2.00 P. M.

The sixty prizes, in the nine Events, will be distributed after the banquet at the Cleveland Country Clubhouse at 7.00 P. M.

Officers of the A. M. G. A. for 1941 are D. H. Houston, M. D., Seattle, President; Harry E. Mock, M. D., Chicago, and James Craig Joyner, M. D., New York City, Vice-Presidents; Bill Burns, Secretary.

The Cleveland Golf Committee is composed of John B. Morgan, M. D., Chairman, 1822 Republic Building; William J. Engel, M. D., Farrell T. Gallagher, M. D., and F. W. Merica, M. D.

All members of the A. M. A. are eligible for Fellowship in the A. M. G. A. Write the Secretary, 2020 Olds Tower, Lansing, Michigan, for registration application.

Wanted

Information relative to the number of cases of Post Encephalitic Parkinson Syndrome now alive and under treatment.

This request is extended to all doctors in the State for the purpose of statistical information.

Please address replies to:

H. EUGENE MACDONALD, M. D.,
c/o Journal Office,
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Program in Brief
Eighty-Ninth Annual Session
Maine Medical Association
Marshall House
York Harbor, Maine

SUNDAY, JUNE 22, 1941

Golf Preliminaries.

4.30 P. M. First meeting of the House of Delegates.

8.30 P. M. Entertainment for the doctors and their wives.

MONDAY, JUNE 23, 1941

9.30 to

12.00 A. M. Group conferences with Chairmen.

12.30 P. M. Luncheon.

Tables reserved for Alumni of various medical schools and members of the
Tumor Clinics.

2.00 P. M. Introduction of Visiting Delegates.

2.00 to

4.45 P. M. Scientific Session.

5.00 P. M. Election of President-Elect.

5.30 P. M. Second meeting of the House of Delegates.

7.00 P. M. Reception to President and his wife.

Dinner and Dancing.

Presentation of Fifty-Year Medals.

TUESDAY, JUNE 24, 1941

9.30 to

12.00 A. M. Group conferences with Chairmen.

12.30 P. M. Luncheon. Tables reserved for Past Presidents and County Secretaries.

2.00 to

5.00 P. M. Scientific Session.

Golf Finals.

7.00 P. M. Banquet (dress informal).

Address: Frank H. Lahey, M. D., President-Elect, American Medical Association, Boston.

(OVER)

To the Ladies!

At the 1940 annual session at Rangeley Lakes, 122 women registered, received badges, participated in the entertainment provided for them, and added the "feminine touch" so necessary to make this annual meeting of our Association a success. For this meeting is intended to be a social as well as an educational event.

Mrs. Thomas A. Foster and Mrs. J. Calvin Oram of Portland, and Mrs. Edward M. Cook of York Harbor, will be in charge of the entertainment this year at York Harbor, and urge each of you to be present to help make our 1941 registration the largest ever.

We especially want to call your attention to the Monday evening program featuring dinner dancing, which has proved so popular the past two years. Also to the Conference, Monday, A. M., at 9.30, on *The Vitamins, What They Are, What They Do For You, and Where You Get Them*, to be conducted by J. Ernestine Becker, Specialist in Nutrition, U. S. Department of Labor, Children's Bureau, Washington. You are cordially invited to attend this conference, which has been arranged because of its interest to both the doctors and their wives.

Other entertainment, including a bridge party, will be offered and a more detailed program will be published in the June issue of the JOURNAL.

Register and receive your badge on arrival.

We shall be looking for you.

Convention Rates

The Marshall House York Harbor, Maine

The following Room Rates, which include all meals, will prevail:

Single rooms without private bath but with lavatory with hot and cold water....\$6.50 per day
Double room without private bath but with lavatory and twin beds....\$6.00 per day each person
Double and single room with connecting bath for three persons.....\$7.00 per day each person
Two double rooms with connecting bath for four persons.....\$7.00 per day each person
Double room with bath and twin beds for two persons.....\$7.00 per day each person
Single room with bath.....\$8.00 per day

The charge for non-registered guests for meals will be as follows:

Breakfast\$1.50
Luncheon\$2.00
Dinner\$2.50

Garage storage will be 50c per day. Outdoor storage parking space will be provided without charge.

Golf green fees will be \$1.00 per day. (one-half the regular fee).

Tennis 50c a day.

Make your reservations early!!

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A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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*"Taber's Cyclopedic Medical Dictionary—
Including A Digest of Medical Subjects,
Medicine, Surgery, Nursing,
Dietetics, Physical
Therapy"*

By: Clarence Wilbur Taber, and 14 Associates.

1488 Pages, 273 Illustrations.

Published by F. A. Davis Company, Philadelphia, 1940. Price: Thumb-indexed, \$3.00. Plain, \$2.50.

Taber's is not only a dictionary on medical subjects, it is a comprehensive medical lexicon as well. It was written by a corps of medical specialists for the medical, nursing and allied professions. It is claimed that it almost completely satisfies the average needs of the practicing physician and nurse. It is very moderately priced and is said to contain many features not usually found in larger and more expensive works. Those who work among people speaking such foreign languages as French, German, Italian and Spanish will find the 370 questions to be asked for purposes of obtaining anamnestic information of considerable value. Its small bulk is another valuable feature most appreciated by mobile practitioners in the civilian and military medical services.

*"MacLeod's Physiology in Modern
Medicine"*

Edited by Philip Bard, Professor of Physiology, Johns Hopkins University School of Medicine.
Ninth Edition.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$10.00.

This ninth edition is brought up to date. The editor and his nine collaborators have made this

possible. The work was subjected to a thorough revision in order to meet with the requirements of medical students. Several new chapters have been added, some others heavily revised and still others combined under common headings. The bibliography and index have been enlarged in conformation with the needs created by the addition of new and revised material.

*"Hemorrhagic Diseases — Photo-Electric
Study of Blood Coagulation"*

By: Kaare K. Nygaard, M. D., Former Fellow in Surgery, The Mayo Foundation; Former Assistant Surgeon, The University Clinic, Oslo; Fellow of The Alexander Malthe Foundation for Research in Medicine, Surgery and Gynecology.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$5.50.

As commonly spoken about, blood coagulation tests are simple in kind and few in number. The author of the book under review, however, lists thirty-four different methods of testing the coagulability of blood and finds that none of them is as accurate as the photo-electric method, which has been perfected by him. He presents a long list of investigators who have made use of photo-electric methods in the investigation of many and varied subjects of investigation ever since 1921 up to date. He believes that the method can be extended further in the study of progressive reactions. After describing the underlying principles of the photo-electric method, the photelgraph, the photelgraphic tracing or coagulograms, he goes into the practical application of the method in the study of coagulability of blood and its components in various diseases, including the hemorrhagic diseases of the newborn. The work is well illuminated with typical hemographs and case reports as well as bibliographic references.

"Foreign Bodies Left in the Abdomen"*The Surgical Problems**Cases, Treatment, Prevention**The Legal Problems**Cases, Decisions, Responsibilities*

By: Harry Sturgeon Crossen, M. D., School of Medicine, Washington University; and David Frederic Crossen, LL. B., School of Law, Washington University, St. Louis, Mo.

With 212 Illustrations.

Published by The C. V. Mosby Company, St. Louis, 1940. Price, \$10.00.

This is an honest book. It admits that the human error element must always be considered and that it requires protection for and against its operation in the practice of medicine and surgery. In this new work the authors elaborate on hundreds of case histories where the presence of foreign bodies created medical, surgical, and legal problems. To the medical practitioner the book is of inestimable value. Before his very eyes are unfolded situations arising from inclusion of foreign bodies in the human body, problems are solved which probably would never have become problems if methods of positive prevention of human error, accident and a false sense of security could have been employed. It is shown where the simplest devices for the prevention of accidental inclusion or retention of foreign material give most efficient service.

What makes this work doubly valuable to the practitioner is the fact that many cases are treated from the medical and from the legal standpoint and final court decisions are presented. It attempts to show that the surgeon, his assistants, the attending nurses, and the hospital must assume their respective share of responsibility whenever surgical service is rendered.

"An Introduction to Dermatology"

By: Richard L. Sutton, M. D., Sc. D., LL. D., F. R. S. (Edin.) Emeritus Professor of Dermatology, University of Kansas School of Medicine; and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edin.), Assistant Professor of Dermatology, University of Kansas School of Medicine.

With 723 Illustrations.

Fourth Edition.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$9.00.

This book is a condensation of the tenth edition of "Diseases of the Skin" by the same authors. It is intended to supply medical students, collegi-

ate and post-graduate, with the essential facts of dermatology in a somewhat abbreviated but completely descriptive form. There is a large bibliographical index which will make it easy for every studious seeker for further and more extended information to go to the original sources.

"The American College of Physicians—Its First Quarter Century"

Historian: William Gerry Morgan, M. D., LL. D., M. A. C. P. Fellow (1916), Councillor and Regent (1916-29), Governor (1929-32), Secretary-General (1932-37), Vice President (1937-38), and Master (1940) of the American College of Physicians; Professor of Gastroenterology and Emeritus Dean, Georgetown University School of Medicine, Washington, D. C.; Former President, American Medical Association.

Published by The American College of Physicians, Philadelphia, Pa., 1940. Price, \$2.00.

In 1913 Dr. Heinrich Stern attended a meeting of the Royal College of Physicians in London. On his return to New York City he discussed with his friends possibilities and the desirability of founding An American College of Physicians. After two years of deliberation The American College of Physicians was incorporated on May 11, 1915.

This book is a complete record of the founding of this great institution and its development up to the present time, on its twenty-fifth anniversary. It is a very interesting piece of documentation of efficient coöperation of physicians for the benefit of the medical profession and of suffering humanity.

John Homans—Continued from page 110

The diagnosis must usually be made with the needle, the clinical signs often being confusing. If a thin, infected fluid is found, its bacteriology is studied. Repeated tappings result, after days or weeks, in a thickened fluid, more like pea soup. At this time, a catheter is introduced through a trochar, by way of an intercostal space, and air-tight, water-sealed drainage is established. This may result in cure, but in the event that it does not, the X-ray must usually reveal the state of the lungs and pleura before rib-resection can be used.

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The Journal of the Maine Medical Association

Volume Thirty-two

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No. 6

*Arterial Deficiency in the Legs (Including Diabetic Gangrene)** *Head Injuries**

By JOHN HOMANS, M. D., Boston, Massachusetts

*Arterial Deficiency in the Legs (Including Diabetic Gangrene)**

Arterial deficiency shows itself in very much the same way, whether the underlying cause is arteriosclerosis in the normal individual or diabetic, or whether it is thrombo-angitis obliterans. There is always some interference with the use of the legs and the deep redness, or cyanosis, or gangrene which marks the onset of the serious phase of the disease may be much the same in each case. It is by the history and by the background against which the serious symptoms appear that the various diseases can be distinguished, clinically; and there are noteworthy differences between the states which develop slowly and those which develop rapidly. Usually, a slow onset means a "dry" atrophic type and a rapid onset, a "wet" swollen type. These are, of course, general statements which will be amplified in the further description.

ARTERIOSCLEROTIC GANGRENE

The individual almost invariably is over 60 and may be of either sex. Locomotion is

somewhat slowed, and there will seldom be a complaint of symptoms covering a very long time, usually not more than a few months. The patient is apt to complain of coldness, perhaps some degree of numbness of the foot, and often of the typical intermittent limp. The appearance of the limb will be one of atrophy and the skin will usually be white. There will seldom be present a pulse in the peripheral blood vessels, or at the best, a feeble one. Actually, an arteriosclerotic deficiency is a somewhat patchy one so that a fair blood supply in one place is not inconsistent with an absent one in another. There may be a deformity of the toe nails, especially a lateral curving with thickening of the great toe nail, and on elevation of the foot for two minutes, pallor will be very marked, although in the absence of actual gangrene, a very faint pink will remain while the leg is elevated. The small, empty, veins will become narrow, shallow ditches in the subcutaneous tissues. On depressing such a foot, the color is slow to return, and when it does return, there will often be some cyanosis.

* From a Symposium delivered before the annual session of the Maine Medical Association, June 24, 1940, at Rangeley Lakes, Maine. Also at the Squaw Mountain Inn, July 25, 1940, before a joint meeting of the Piscataquis, Penobscot, Aroostook, Kennebec and Somerset County Medical Societies.

This is a picture of the arteriosclerotic deficiency which may, at any time, be changed to a much more serious situation.

THROMBOSIS SUPERIMPOSED UPON ARTERIOSCLEROTIC DEFICIENCY

Acute symptoms, associated with pain, swelling, decided discoloration and perhaps serious gangrene, appear as a consequence of thrombosis in one of the larger arteries, usually some part of the femoral. The symptoms may be much like those of arterial embolism. Pain, sometimes, may be agonizing and uncontrollable. On the other hand, development of the change may be rather quiet and associated merely with deep redness or cyanosis of the forefoot, perhaps a gangrenous spot upon the end of one of the toes or over the first metatarso-phalangeal joint. The discomfort or pain of the individual is increased by elevation of the leg, and decreased, as a rule, by leaving the leg in some degree dependent. The appearance of the foot, on elevation, is that of cadaveric whiteness, and upon subsequent depression, the toes and forefoot become deep red or cyanotic. Sometimes, the whole foot or the whole lower leg is threatened with gangrene, and presents an appearance of purple discoloration or actual blackness with blistering. However, it should be realized that there is considerable variation in symptoms, and it is only possible to say that some rather rapid additional narrowing of the principal blood vessels has occurred, threatening loss of toes, or even the leg. The appearance of the affected leg is decidedly different from the other one which merely exhibits the chronic change already described.

DIABETIC GANGRENE

It should be realized that much diabetic gangrene is actually a somewhat premature arteriosclerosis, while some of it is in the nature of infection and necrosis of the small bones of the toes, or of their small joints, due to the diabetic's lack of resistance to infection.

The arteriosclerotic type of vascular deficiency takes on all the forms seen in ordinary arteriosclerosis, that is, the chronic atrophying condition, pallor, coldness, and so on. Gangrene is capable of being dry and goes

through the stages of dry blackness with gradual demarcation and sequestration. It should be regarded, however, as especially serious, because the onset of any accidental infection is apt to precipitate a very dangerous situation. If thoughtlessly treated, by local amputation, removal of a toe nail, or the paring of a callus, infection is likely to supervene and lead to high amputation. If treated conservatively, with a view to gradual separation of the gangrenous toe or whatever, healing is likely to occur.

The infectious type of diabetic gangrene is seen in necrosis of a phalanx, disintegration of a small joint or perhaps gangrene of a small area of skin with secondary lymphangitis. Such forms are usually insensitive and one may see a disorganized, reddened toe associated with lymphangitis, which causes the patient no pain whatever. Naturally, at times, this sort of disease merges into the arteriosclerotic sort. However, every diabetic with a peripheal circulatory disorder is not sitting on a powder barrel. Drainage can be established, necrotic parts may successfully be cast off, and even, at times, removed with success *by controlling the diabetes and treating the tissues with special respect.*

TREATMENT OF ARTERIAL DEFICIENCY OF THE ARTERIOSCLEROTIC SORT

Treatment of these conditions is considered under one head in order to contrast the reactions of the different deficiency states.

For the chronic arteriosclerotic deficiency, without acute symptoms, the patient should be protected against cold, denied the use of tobacco, given passive vascular exercises, that is, of the Buerger-Allen sort, with the idea of establishing a collateral circulation but without much expectation of any great change. Woolen socks should be worn, both day and night, and on the whole, exercise, up to, but not beyond the point of tolerance should be taken. The toe nails should be soaked before cutting or filing, calluses and corns should be sand-papered off, and, in general, the part should be protected against infection.

For the more or less acute state, the swollen purple type, due to thrombosis, the patient must always be kept in bed, and the doctor's ingenuity may be taxed to provide comfort.

The optimum position of depression should be sought (especially for sleeping) and it may be of advantage to attempt to secure vasodilatation by employing the suction-pressure boot or intermittent venous hyperemia. However, such measures are uncertain and simple procedures may work as well as the more complicated. The leg, should, of course, be kept warm, but not heated. Antiseptic coverings should be used. Should serious lymphangitis or actual gas gangrene occur, emergency amputation must be performed, and, as a rule, amputation through the knee joint or lower thigh is sooner or later, inevitable. However, it may happen that necrosis of a few toes, only, may occur. And these, after waiting, for months, if necessary, for a line of demarcation to form, may be removed in expectation of healing.

Diabetic gangrene of the arteriosclerotic sort requires no special directions, except that unusual precautions against infection should be taken.

Diabetic gangrene of the infected sort requires, first, control of the diabetes, drainage, and a sizing up of the situation with the aid of blood culture, the study of blood sugar, and so on, all of which, as you know, requires the coöperation of both medical and surgical services. It does not often happen that defeat must be admitted and immediate amputation performed. But should that be the case, a guillotine amputation through the lower leg or through the lower thigh, as the case may be, is usually demanded.

Provided the situation seems favorable, a 24-hour period of *drainage*, with control of the diabetes, hot applications, etc., and the usual bed life, is in order, and perhaps another period of 24 hours may have to be used to decide whether, in fact, the local lesion can be managed. In case of failure to control the sepsis, a guillotine procedure may be required, as already indicated. Should further conservative treatment be warranted, then, in the end, a local amputation can often be performed, for the blood supply will usually be fairly good. It should, in fact, be recognized that a considerable amount of diabetic gangrene can occur in the presence of strong pulsations in one of the peripheral vessels. The final problem of amputation, when the leg *must* be sacrificed, requires consideration

of the patient's age, state of feebleness, economic conditions, and so on. That is, the question whether the individual can have, and use, an artificial leg must be settled.

THROMBO-ANGIITIS OBLITERANS

This disease is not confined to Jews as was once thought to be the case, and it is certainly not caused by any one factor. But, if there is one adverse influence, above all others, which aggravates the disease, it is certainly the use of tobacco. Individuals affected are usually males between the ages of 20 and 40, and when a man in his 50's is in question, a decision between arteriosclerosis and Buerger's disease is exceedingly difficult, though such may not, indeed, be particularly important.

The pathologic feature of this disease is repeated, recurrent thrombosis of the arteries and veins, especially of the leg. In a loose way, there are two types—the peripheral type, in which the small vessels tend to become obliterated by thrombosis, by far the more serious form of the disease, and a type in which the larger vessels, such as the femoral, become thrombosed, and which is distinctly less serious.

The point is that most individuals with thrombo-angiitis obliterans are sufficiently young to possess the ability to set up a collateral circulation through the small peripheral vessels, whereas the arteriosclerotic patient is much less able to do so. The result is that the individual with thrombo-angiitis obliterans has a long, preliminary period of minor ailments before anything serious occurs. Of course, there are the fulminating cases, but I am speaking of cases of the usual severity. For instance, the patient will have noticed an intermittent limp, a crampy, or even stabbing discomfort of the calf or foot, on walking. This symptom is usually brought on by activity, and relieved at once by rest. The individual, as I say, will have noticed such a symptom for one or even many years before the pain, the cyanosis, and slight edema of the more advanced stage of the disease becomes evident.

The patient is often aware of a reddish-blue discoloration of the toes with some edema of the forefoot before any actual gangrene

occurs, but he is apt to experience some spontaneous pain, especially, at night. While this varies in severity, it tends to be worse than the pain of the arteriosclerotic, whose foot may somewhat resemble that of the younger individual suffering from Buerger's disease. In the final stage, gangrene occurs, but the gangrene is usually limited to some part of the toes, some part of several toes, or the whole of one toe, and these parts will be gradually cast off, just as is the case with the arteriosclerotic. More than that, if, under treatment, demarcation becomes evident, and the color improves, such parts can be amputated with far less risk than is the case with arteriosclerotic gangrene.

Pain is really the most serious feature of this disease. A rapidly developing occlusion of one or more of the great arteries of the lower leg, such as the posterior or anterior tibia, for instance, will lead often to almost uncontrollable spontaneous pain and the peculiar sensitivity to light touch which is so characteristic of the acute form of the disease. Strangely enough, fungus infection is often present, getting under the toe nails, and apparently leading to serious local complications. Amputation, if performed, is usually performed for pain rather than gangrene.

TREATMENT

An outline of treatment must necessarily be sketchy, but there are certain fundamental measures which are of great value.

- (1) No more tobacco during the individual's entire life.
- (2) Buerger-Allen exercises.
- (3) Treatment of the fungus infection of the skin.
- (4) Sufficient elevation to relieve edema, but not sufficiently high as to cause uncontrollable pain.
- (5) In a difficult situation—the crushing of the local sensory nerves.
- (6) Amputation—which is after all a confession of failure.

Head Injuries*

Fractures are of less consequence than the associated injury to the brain, and most fractures of the bursting type, due to sudden squeezing of the skull, are hardly of themselves worth considering as a special problem. Indented fractures, both open and closed, must, of course, be separately studied. The terms CONCUSSION, CONTUSION, and COMPRESSION are hardly worth preserving. It is better to use, for one group, the term, LESS SEVERE INJURIES, that is, those *not* associated with hemorrhage or cerebral laceration, and for the other, MORE SEVERE INJURIES, that is, those associated with hemorrhage or cerebral laceration, or both.

LESS SEVERE INJURIES

The individual is often rendered unconscious, or is at least dazed, and may be unable to make intelligent responses. This test is very much used on the football field, for instance. If the individual can remember routine things, he is often allowed to go on playing, whereas, if he cannot recall the day of the week or some matter dealing with signals, he will be taken out. The patient's appearance, pulse, and breathing are seldom absolutely natural. The pulse may be rapid, the breathing irregular, or the pulse may be slow and the breathing slow, perhaps of the Cheyne-Stokes type. Even if the patient regains consciousness, and seems intelligent, he will often fall, in the days succeeding, into a deep sleep unless continually aroused. He may suffer from headache, waves of vomiting, and upon attempting to get up, may be dizzy.

It is impossible to say whether such an individual as this will, later on, show evidence of increasingly serious symptoms, due to slow hemorrhage within or outside the dura. Therefore, close observation of such persons must be made. In all cases, an expert should take X-rays, provided such are procurable, because mere evidence of a crack, while not of itself important, may indicate that the injury has been more severe than was supposed. Rest in bed, during this period of headache and dizziness, is all that is required in the way of actual treatment. Subsequently, the patient should be observed to detect late complications, if any.

MORE SEVERE INJURIES

The patient will usually be unconscious, or having regained consciousness, will lose it again. There may be hemorrhage from the mouth, nose and ears. The pulse is likely to be rapid, breathing irregular, or perhaps shallow, and blood pressure, low. If a compensatory reaction has come into play, the blood pressure will be high and the respiration deep and stertorous, with or without a Cheyne-Stokes rhythm. The pulse will then be slow and regular. X-ray will usually show a fracture, especially at the base.

Hemorrhage should usually be suspected, especially a subdural hemorrhage. Evidence of this is best obtained by a lumbar puncture. It is unwise to draw off too much fluid, since, at an early stage, further bleeding may thus be encouraged. In observing the fluid upon lumbar puncture, it will be noted that in case of slight bleeding, the fluid will be pinkish. In serious cases, it will be exceedingly bloody, and in the stage of recovery, it will be yellowish (xanthochromic).

At an early stage, the localizing signs are not particularly important. It will be worth while, however, to study the deep reflexes, the superficial reflexes, the behaviour of the eye muscles and that of the pupil. It may be possible in this way to determine that on one side of the brain or the other, cortical damage is absent, or that, on the other hand, it is beginning or increasing.

SUBDURAL HEMORRHAGE

At the present time, subdural hemorrhage is regarded as far more important than extradural. In many instances, hemorrhage is general about the base of the brain, the cortex is lacerated, and the patient is obviously ill. Localizing signs are absent. The problem, then, is really one of keeping the patient alive through a difficult period. In other instances, the hemorrhage is located upon the surface of the brain over an area which is capable of causing various recognizable symptoms. These symptoms will often be more noticeable on one side of the body than on the other. However, at an early stage, subdural hemorrhage does not show itself clearly. Formerly, it was only recognized

years later, when the individual had already become irresponsible or insane.

Nowadays, the condition should promptly be recognized even in infants and children. Headache and mental change are the rule. Choked disk is apt to be present. There may be weakness of a hand or one side of the face. There are increased reflexes on the side opposite to the hematoma. In infants, the coronal suture may be tapped. At a later stage, however, a drill hole should be made over the suspected area, especially over the posterior parietal region. And, in the hands of an expert, if blood is not encountered beneath the dura, a ventriculogram can be made to give definitely the location of the subdural blood and displacement of the brain. An actual *clot* is not necessarily present. Indeed, as a rule, by the time subdural blood is detected, it is usually enclosed in a dializable membrane, as a result of which the highly proteinized fluid contained within is added to by the inflow of cerebral spinal fluid, and so the sac grows in size.

Extradural bleeding is rather rare. Usually, there has been a temporary period of unconsciousness, followed by recovery, and then return to headache and deepening unconsciousness due to the slow escape of blood from the middle meningeal artery. The clot is likely to overlie the temporal lobe, thus giving no localizing signs, at first, but ultimately compressing the cortex, causing convulsions or paralysis, associated with increased deep reflexes.

In both sorts of hemorrhage, the localization of the blood is not easy. It may be present on both sides, and may even appear to be on one side when actually it is accumulating on the other. Therefore, bilateral exploration is often required.

TREATMENT

There is a useful routine treatment for all such serious injuries, first-rate nursing being the first consideration. The mouth and pharynx are apt to be full of mucous, which is drawn back and forth by the stertorous respirations. Vomiting may add to the material readily inhaled into the lungs. Thus the air passages must be kept clear by suction through a soft catheter. The nose and ears

must be wiped clean with cotton swabs. The patient's restlessness, not well controlled by sedatives, requires constant watching lest he do himself an injury. The Fowler position is advisable. A diet low in fluids is helpful. This of itself tends to dehydrate the brain. If the patient can not safely swallow, fluids must be given by hypodermoclysis or intravenously. To bring about additional dehydration, magnesium sulphate may be given by mouth and rectum, and 50 per cent intravenous glucose solution — 50-100 c. cm. by vein. After the first few days, repeated lumbar punctures are often helpful.

INDENTED AND COMPOUND FRACTURES

Here, the fracture becomes important, since it injures the brain itself, or introduces sepsis, or combines the two accidents.

The indented fracture without a break in the soft parts covering the skull is an unusual injury. A heavy blow must have been delivered with a somewhat pointed object. The inner table of the skull may even be comminuted by being sprung inwards, without an actual break in the outer table. However, both tables are usually driven in, tearing the dura. The X-ray best tells the story. As for the injury to the brain, there is much less general disturbance, in the form of unconsciousness, etc., and more in the way of

serious after-effects, due to cortical irritation (loss of confidence, irresponsibility, epilepsy) than is generally supposed. It is, therefore, advisable, provided the exact state of the lesion can be demonstrated, to put the patient in the way of the most deliberate, painstaking, aseptic, restorative procedure. Elevation or removal of the depressed fragments, sucking out contused brain, and exact repair of the dura should be the plan.

Compound injuries are almost necessarily contaminated wounds made by sharp or rough objects. Foreign material is often driven through the meninges, and the brain is lacerated. Emergency exploration of such wounds is usually most unsatisfactory, leading to a high percentage of deaths. Munro† is the champion of a procedure based on the preliminary restoration of the patient, followed by the most thorough debridement of scalp, skull, meninges, and brain. The operation is carried out deliberately after the preliminary observations are made and the patient's general condition has been studied, fluid has been supplied, and shock overcome. Injured tissues are removed and, above all, the contaminated and contused cortex is sucked out and the dura fully repaired. Whether or not a gap is left in the skull, which is almost inevitable, the skin is made to cover the area of injury by a plastic, if necessary.

† Munro, Donald. The Treatment of Compound Fracture of the Skull. *N. E. J. Med.*, 213:551, September 19, 1935.

The National Nutrition Conference for Defense

The National Nutrition Conference for Defense called by President Roosevelt to meet in Washington May 26 to 28 was conducted through nine closely related sections, section III under the head of Public Health and Medical Aspects of Nutrition.

Each section made recommendations to be included in a report to President Roosevelt of existing conditions with suggestions for

coördinating all necessary resources of this country to combat the widespread peril of malnutrition.

It is proposed to publish the report on section III in the July issue of this JOURNAL.

This report will aid very much, it is believed, in developing facts which will come out of the discussions developed by Miss Becker at our annual meeting on Vitamins.

Perforative Diverticulitis of the Sigmoid

CASE REPORT

By DEXTER E. ELSEMORE, M. D., Dixfield, Maine

The incidence of perforation in acute diverticulitis of the colon is rare. It is especially so in the age group below 30 years of age. Bearse¹ estimates that 5.7 patients in 1,000,000 of population have diverticulitis of the colon requiring operation.

In 1939 Bearse¹ reported three cases, all under the age of 30. Two of these were of the sigmoid and the other of the ascending colon. All were associated with localized abscess and all recovered after the institution of drainage.

It is generally conceded that surgery should not be done in acute diverticulitis unless complications, such as perforation or obstruction, have occurred or are imminent. The usual procedure in these acute emergencies is drainage, with or without colostomy, and followed later by resection of the diseased area if indicated.² The mortality in operated cases is ten percent.³

The case submitted was resected at the time of exploration because of the extensive area of necrosis of the bowel adjacent to the perforation and the fact that the peritonitis was not localized.

CASE REPORT

Mr. T. H., aged 28, a laborer, was seen on October 22, 1940. He had had diarrhea on October 20th but no stools since. He was nauseated but had not vomited. On October 21st, intermittent generalized abdominal pain was present which became steady about midnight. By morning it was fairly well localized around the umbilicus.

He gave a history of having had two similar, though milder, attacks within the past year.

When first seen the temperature was 102° F. Pulse 120. Respirations 20. There was tenderness and slight muscle spasm over the whole abdomen. The area of most acute tenderness was just to the right and slightly below the umbilicus. No masses could be felt. Rectal examination was negative except for tenderness which was more marked on the right.

Laboratory work revealed a leucocytosis of 21,200 with 92% neutrophils, 5 lymphocytes and 3 band forms. The hemoglobin was 105 (S) and the red blood count was 5,230,000. The urine was negative.

A diagnosis of perforated appendicitis was made and the patient prepared for operation.

The abdomen was opened through a McBurney incision. A small amount of cloudy fluid was noted, and the omentum and bowel were markedly injected and partially covered with fibrin. The appendix was not located, but it was evident that the primary pathology was not in the right lower quadrant; so this incision was closed with drainage of the subcutaneous tissue, and the abdomen reopened through a supra pubic mid-line incision.

Thick yellow pus with a foul odor was found in the pelvis. An inflammatory mass involving the sigmoid and its mesentery was found on the left. Both structures were markedly edematous and apparently gangrenous for an area about three inches in length. In the center of this area, on the mesenteric border of the sigmoid, was a perforation about 0.5 cm. in diameter. Three small pieces of hard fecal material were found free in the pelvis.

The above area was resected with the aid of a Rankin clamp by the Mikulicz method, bringing the two limbs of the sigmoid out through a short incision in the left lower quadrant.

Two additional diverticuli were found in the resected specimen and noted in the pathological report.

The post operative course was unusually smooth during the first week, after which there was continuous fever until a subphrenic abscess on the right side was diagnosed and drained on November 25th.

Following this, convalescence was uneventful.

- (1) Bearse, Carl; *J. A. M. A.*, 113: 1720-1722, Nov. 4, 1929.
- (2) Lockhart-Mummery, J. P.; *Lancet*, 2: 1401-1404, Dec. 17, 1938.
- (3) Jones, Thomas E.; *Cleveland Clinic Quarterly*, 4: 207-211, July, 1937.

Alkaline Incrusted Cystitis

By RODERICK L. HUNTRESS, M. D., Portland, Maine

Infection and hemorrhage are the two greatest troubles in urology, and unfortunately one tends to cause or aggravate the other. With the better visualization of the new instruments and the high frequency current, hemorrhage is now more amenable than in the past. The management of most infections is also much easier than formerly with the coming of Mandelic Acid and the Sulfanilamide group of drugs. We may say as a generalization that all infections with an acid urine outside of tuberculosis can be readily controlled unless there are complications such as calculi, diverticula, or marked tissue destruction.

The infections of the urinary tract with organisms causing an alkaline urine are still in many cases most difficult to control. *Bacillus proteus ammoniae*, some of the staphylococci, *micrococcus ureae* and some other organisms have the ability to break the urea in the urine to ammonia causing a strongly alkaline urine. These organisms are supposed to be introduced by instrumentation. If the urine is strongly acid before instrumentation, the soil is not fertile for the organisms and growth does not follow. Therefore a strongly acid urine should be obtained as a prophylaxis before instrumentation. Mandelic Acid has no effect on these organisms in the strongly alkaline urine which cannot be made acid. Fortunately the sulfanilamide drugs are more efficacious in an alkaline urine and will clean up the infection if the drug reaches the bacteria. But if there is any tissue necrosis, from malignant tumor or operation, alkaline phosphates are deposited on the area and the bacteria flourish beneath this protecting crust. In these cases drugs by mouth are of practically no value. These cases have extreme frequency and urgency if the crusts are in the bladder or bladder neck, because of the associated cystitis. The patient may be cured of prostatism but still suffer all the symptoms and in fact be worse symptomatically than before operation. Bladder washes, with silver nitrate or acetic acid or mercurochrome may remove the crusts if they are loosely attached and then the infection may

be easily controlled by the usual drugs; usually though the crusts are too adherent to wash off. *Bacillus Acidophilus* may be effective in some of these.

In the past cystotomy was advised, curettage of the crusts and application of 10% Ag No₃ to the areas. This was sometimes successful but unless all the crusts were removed a recurrence was inevitable. A major operation and still in trouble. Also many patients were in no condition to undergo the procedure.

It seemed to me the resectoscope could remove the incrustations adequately with a minimum of discomfort to the patient. The technique is simple, removing the crusts with or without any current in the loop and then electro coagulation of the area involved. This should kill bacteria in the tissues. As this procedure is done under low spinal, and with no pain sensation, it was also thought advisable to instill an ounce of 10% silver nitrate through a catheter, into the empty bladder and then to wash the bladder out after a few minutes with saline or water. This procedure has been followed in eight patients with complete relief except in one instance where it was necessary to repeat the procedure due to relapse three weeks afterward, probably due to a diverticulum. It is a great pleasure to find the urine acid the night of the procedure, after the long time of finding it alkaline. Methenamine with sodium acid phosphate or Mandelic Acid is immediately given by mouth and the urine usually becomes pus free in a week. If desired, bladder washes of 1% Mercurochrome or 1-1000 Ag No₃ may be used daily also as a prophylactic.

I believe this comparatively simple and safe, although delicate method of treatment will continue to be helpful in the future as in the past and can see no reason why it should not.

It is very unpleasant for both patient and physician to find the same symptoms after an operation, which is supposed to end urinary difficulties and a great relief to both to have a restoration to normal.



THOMAS A. FOSTER

President Maine Medical Association, 1940-1941

The President's Page

To the Members of the Maine Medical Association:

The JOURNAL publishes this month the annual Reports of your Committee Chairmen and your District Councilors. The reports compiled for the House of Delegates are published for your information. They represent the efforts of the various committees in your behalf. The accomplishments or lack of accomplishments of the Committees strengthens or fails to strengthen the position of our State Association, as the case may be.

Please read the reports, analyze them and form some opinion about them. The Officers alone will never be able to keep the Association a progressive, useful organization if the rank and file are indifferent to the aims and objects of their administration and lack interest in the problems which confront the Society. This is a democratic institution. To sit back and sigh that a small group of political medicos run the Association and let it go at that is a disloyal service to the organization. There is work enough for all who show any disposition or willingness. And with the Defense Program calling for doctors the supply of workers in the Association will be decreased. Right now is a good time for every man to come to the aid of the Association. The annual meeting is approaching, your elected delegates will take their seats in the House of Delegates; if you have questions, if you have resolutions, consult your delegates. They represent you and they will carry out your instructions. If you think we need a "loyal opposition," that will be all-right. With an earnest, sincere, "loyal opposition" we need have no fear. A strong, intelligent unity of action will result from it. Cast aside indifference. Take a fresh interest in your State Association which has weathered 89 years of service and has made an honorable record among State Societies. The Scientific Committee has prepared a program of an instructive and helpful nature for the annual meeting. Come and enjoy it.

In concluding these messages, may I say once again that I have enjoyed my association with all the officers and members with whom I have come in contact. I want to thank them all for gracious and courteous reception of my efforts. It has been an experience which I will treasure always. And I finish my work with a deep sense of awareness of the many things which have been left undone. I wish my successor health, strength, and happiness in his coming year and pledge him my loyalty and whatever help my past experiences may avail him.

THOMAS A. FOSTER, M. D.,
President, Maine Medical Association.

Editorial

Guilty of Criminal Conspiracy

On the 4th of April a jury in the District Court in Washington brought in a verdict of guilty against the American Medical Association and the District Medical Society of Washington. The verdict rests on an appellate decision that physicians *are* in trade or commerce. As the antitrust law now stands medical *associations* are in trade or commerce but carpenters' and other unions are not. Curious as the situation is, and as yet there is no finality to the assumption on which the verdict rests, since the attorneys for the American Medical Association and the District of Columbia Medical Society are undertaking at once legal proceedings towards: 1. A motion to set aside the verdict of guilty and to enter judgment in favor of the two corporate defendants. 2. A motion in arrest of judgment. 3. A motion for a new trial. Even if the verdict is less inconsistent than the Sherman Act itself, as recently interpreted by the Supreme Court, it is a matter of fact that it is to that same court that medicine must come for a final decision.

It is no indictment against one's common sense when confusion exists in understanding the verdict. The jury exonerated five officials of the A. M. A. and fourteen distinguished members of the profession in the District of Columbia, yet a criminal conspiracy has been defined "as a meeting of human minds for concerted action" in violation of the law. The "minds" of any organization are the executives who conduct the business, yet only the organizations were convicted. What, however, seems more clear is the objective of the Department of Justice in bringing the suit. It is felt on the part of some commentators that it was the unfair frustration on the part of the American Medical Association, and by implication some state associations, which prevented fair experimentation with co-operatives, groups of physicians who would

practice as they would in a hospital, also various plans for the prepayment of medical care any or all of which it was hoped might lighten the economic load on the part of those unable to bear it in whole or part. It has also been stated that "there is a well defined and powerful group which seeks to remove the control of medical *service* from physicians and place it in the hands of political groups regardless of the quality and effectiveness of the service to the public."

What will obtain in ultimate changes in our economic and social structure as the end result of the all-out war in Europe no one can predicate. High sounding words about the contribution of the medical profession towards the national defense will accomplish no more than like oratory will influence the building of tanks or their operation in the hands of an enemy. Despite the fact that one important branch of the government has seen fit to obtain and prosecute an indictment against organized medicine, the profession individually and collectively will not be found wanting in time of need; it never has and never will. Whatever satisfaction may accrue to the official or officials who may have felt their procedure had sufficient warrant is entirely theirs to enjoy; few will envy their pleasure. The time may come in this unhappy world when peace, decency and the rights of men will prevail.

It is undoubtedly a fact that very few physicians took the time and trouble to read the testimony of the trial as it was published in the *Journal of the A. M. A.* Such time would have been far from wasted and might have been very enlightening. The instructions of Justice Proctor are of more than mere interest. They are most instructive and informs the profession very plainly what it can do in many and various activities and remain in the bounds of legal conduct.

Necrologies

In Memoriam

Bailey, Bernard Andrew,	Wiscasset
Burritt, Guy Llewellyn,	Harrington
Coburn, George Hayward,	Rangeley
Cook, Edward Chase,	York Village
Derry, Louis Andrew,	Portland
Hamblen, Howard,	South Windham
Hart, Willis F.,	Camden
Haskell, William Langdon,	Lewiston
Hill, James Frederick,	Waterville
Joss, Luverne Harris,	Richmond
Lamb, Frank Wilson,	Portland
Murphy, John Luke,	Eastport
O'Sullivan, Timothy Joseph,	Portland
Patterson, Herbert J.,	Portland
Pletts, Robert Cole,	Brunswick
Schrivver, Allan Edward,	Brewer
Varney, John Roscoe,	Old Town
Way, George Franklin,	Lincoln
Whitney, Arthur Thomas,	Houlton

Howard Hamblen, M. D., 1873-1941

Doctor Howard Hamblen of Windham, Maine, died on February 2, 1941, following a brief illness.

Doctor Hamblen was born at Windham on November 7, 1873, the son of Byron and Mary Hamblen. He was educated in the local and neighboring schools. He graduated from the Boston College of Pharmacy and received his Medical Degree from Tufts Medical School in 1900. Doctor Hamblen began his career as a physician in Maynard, Mass., and remained there eighteen years, having established a large practice and made many friends.

Following the death of their daughter, an only child, Doctor and Mrs. Hamblen returned to Windham, where they had maintained an attractive summer home. He had lived there for the past twenty-two years, interesting himself in state and town affairs in addition to carrying on a large practice.

Doctor Hamblen was a Mason, a member of the American Medical Association, the Maine Medical Association and the Cumberland County Medical Society.

His funeral was held in the Friends Meeting House at Windham. A Masonic service was held, and the large group of friends and patients attending attested to the place that he and a devoted wife had made for themselves in the community. He is survived by his widow and a sister, Mrs. S. R. Garland of Wayland, Massachusetts.

By his death, the medical profession has lost an able member, the community a fine citizen, and his friends a true and loyal comrade.

James Frederick Hill, M. D., 1854-1941

Doctor James Frederick Hill, of Waterville, Me., died on May 1, 1941.

A native of Waterville, Doctor Hill attended Colby College and began his study of medicine with Doctor Frederick C. Thayer. Later he attended Dartmouth and was graduated from the Maine Medical School in 1885.

Following post graduate work in New York, he devoted himself to a long career as a specialist in the treatment of eye, ear, nose and throat diseases.

Doctor Hill was a member of the staff and consulting surgeon of the Maine Eye and Ear Infirmary for many years. He was an honorary member of the Kennebec County and Maine Medical Associations, a member of the American Laryngological, Rhinological and Otological Society and the American Medical Association.

Doctor Hill held numerous civic and fraternal offices.

He is survived by two sons, Doctors Frederick T. and Howard F. Hill of Waterville.

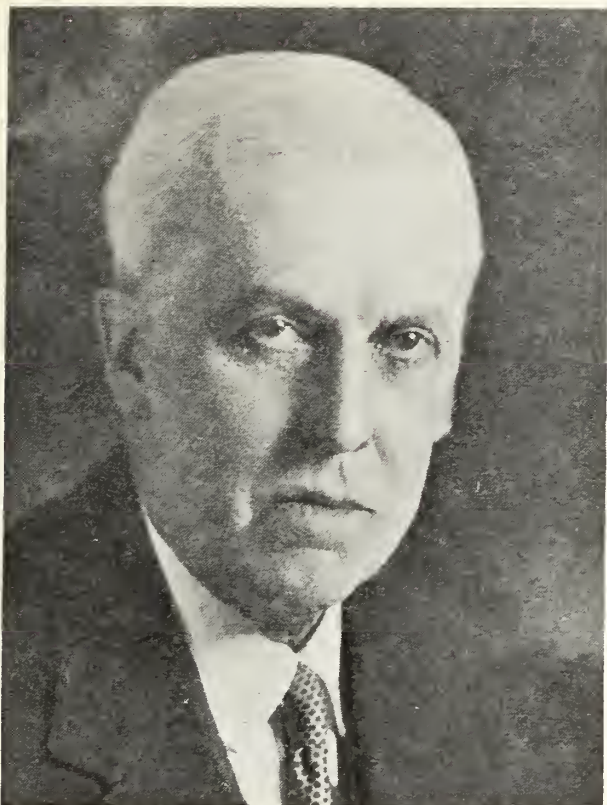
Luverne Harris Joss, M. D., 1902-1941

Luverne Harris Joss, M. D., of Richmond, Maine, died suddenly at her home there on March 27, 1941.

Doctor Joss was born in Jackson, Alabama, on October 26, 1902. She was a graduate of Peabody College in Nashville and of Vanderbilt University, College of Medicine, Nashville, Tenn. She interned at Bellevue Hospital in New York and was resident at the Dr. Willard Parker Hospital in Valhalla, N. Y., and later at the Grassland Hospital at the same place.

Since coming to Richmond, Maine, about five years ago, Doctor Joss had been actively engaged in tuberculosis work. She was the clinician for the Augusta Tuberculosis Prevention Service. She was also much interested in civic affairs, and was serving her third term as chairman of the school board.

Doctor Joss is survived by her husband, Merrill E. Joss, M. D., of Richmond; her mother, Mrs. Henry Harris of Jackson, Ala.; two brothers, Earl H. and Tolly H. Harris of Birmingham, Ala.; and two sisters, Mrs. Lillian McKinnon of Birmingham and Mrs. Rosalie Wright of Jackson, Ala.



**Herbert John Patterson, M. D.,
1862-1941**

Doctor Patterson, whose death occurred on May 13, 1941, after an illness of several years, was born in Saco, Maine, on April 1, 1862, the son of John and Uranah Cole Patterson.

He attended Thornton Academy and received his medical training at the Medical School of Maine and at the University of Maryland School of Medicine, having had his M.D. conferred by the latter institution in 1885. His marriage to Martha Jane Chase of Portland, Maine, followed in April, 1893, after the doctor had established a practice in this city. Of this union were born three children — Helen Webb, Robert Chase and Mary Smith Patterson.

Doctor Patterson was a member of the American Medical Association, the Cumberland County Medical Society and of the Maine Medical Association. In 1935, he was honored by the latter organization for having completed fifty years of medical practice. He also was a member of the Portland Medical Club, which group he, at one time, served as president.

It was not my good fortune to know Doctor Patterson well during his active years, years devoted assiduously to obstetrics, a branch of medicine in which he is said to have displayed rare skill. His few remaining contemporaries refer to him as having been a reticent, diffident and rather solemn man but one who "did justice, loved mercy, and walked humbly with his God," whose smile, when bestowed, was benignant, but who, like the famous Doctor Fothergill,

"Seldom he laugh'd, and laugh'd in such a sort,
As if he mocked himself, and scorn'd his spirit
That could be moved to laugh at anything."

Surviving are a daughter, Mrs. J. C. Wicker of Southern Pines, North Carolina; a son, Robert C. Patterson of Bethesda, Maryland; and five grandchildren.

E. W. GEHRING.

County News and Notes

Congratulations

The Secretary's office is gratified to announce that the paid-up membership list, as submitted by the various secretaries of the County Medical Societies, is the best that has obtained in many, many years. This record speaks well for the detail and attention given the work by the county secretaries and a very much appreciated effort on the part of the entire membership of the Maine Medical Association. Today, as never before, membership in one's county and State Association is of the greatest value and the old adage *In Union There Is Strength* was never more true and appropriate to remember.

Cumberland

The 158th meeting of the Cumberland County Medical Society was held at the Eastland Hotel, Portland, Maine, March 28, 1941, at 6.30 P. M.

Doctor Champ Lyons of Boston, guest speaker, spoke on *Heparin and Chemotherapy in Staphylococcal Bacteremia*. The paper was discussed by Doctors Mortimer Warren, Elton R. Blaisdell and Philip P. Thompson.

At a brief meeting following the scientific program, applications for membership were submitted by Arthur B. Woodman, M.D., of Falmouth Foreside and Sidney B. Bramson, M.D., of South Windham. Ralph E. Williams, M.D., of Freeport

was admitted to membership by transfer from the Androscoggin County Medical Society.

A clinic at the Maine General Hospital preceded the evening meeting.

The 159th meeting of the Cumberland County Medical Society was held at the Eastland Hotel, Portland, Maine, May 2, 1941, at 6.30 P. M.

Resolutions on the death of Howard Hamblen, M.D., of Windham, Maine, were read by the President, George O. Cummings, M.D.

Applications for membership were submitted by Joseph G. Ham, M.D., of Portland, and Henry S. Hebb, M.D., of Bridgton.

The speaker of the evening was Edward B. Benedict, M.D., of Boston. His subject was *Endoscopy with Special Reference to Gastroscopy and Peritoneoscopy*. The paper was accompanied by lantern slides and a moving picture film demonstrating the technique of Gastroscopy and Peritoneoscopy. Discussion by Drs. E. H. Drake, T. C. Bramhall, J. M. Parker, E. E. O'Donnell, S. A. Cobb, F. A. Ferguson, T. A. Foster and G. A. Cummings followed.

About forty members and guests were present.

A clinic at the Maine General Hospital, preceded the evening meeting.

EUGENE E. O'DONNELL, M.D.,
Secretary.

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, Tuesday evening, May 6th, at 8.15 P. M., with Dr. M. C. Webber presiding. There were 38 members and one guest present.

Dr. E. A. Greco was appointed Chairman of the Outing Committee.

The paper of the evening, *A Great Scotsman and His Brother*, was delivered by Dr. E. W. Gehring. He told of the life of John Hunter and his brother, William.

Following the meeting, light refreshments were enjoyed.

Respectfully submitted,

ALICE WHITTIER,
Secretary.

Hancock

*All Physicians Welcome
to the
Annual Summer Clinic
of the*

*Hancock County Medical Society
Bar Harbor, July 30th*

The programme begins Wednesday morning at the Mount Desert Island Hospital with surgical and medical clinics, conducted by men with national reputations.

Luncheon at the hospital.

Several optional afternoon sessions, with arrangements for sight-seeing trips about the Island for those who are interested—especially the ladies.

Dinner at one of the resort hotels with the Scientific Session following immediately.

A complete programme will appear in the July JOURNAL.

M. A. TORREY, M. D.,
Secretary.

Kennebec

A meeting of the Kennebec County Medical Association was held at the Veterans' Administration, Togus, Maine, Thursday, May 15, 1941.

Clinical Session at 5.00 P. M., which was presided over by I. E. McLaughlin, M. D., President:

1. Recurrent Fractures, J. E. Wheeler, M. D.
2. Cardiac Aneurism, H. T. Perkins, M. D.
3. Gastro-enterostomy for Pyloric Obstruction, W. W. Hardman, M. D.
4. Glaucoma—Discussion of Two Cases, H. A. Goalwin, M. D.
5. Urological Cases, F. T. Williams, M. D.
6. Pemphigus, M. Z. Cooper, M. D.
7. Jaundice, Differential Diagnosis, N. H. Badaines, M. D.
8. Some Interesting Tumors of Chest, Wm. A. Ventimiglia, M. D.

Dinner at 6.30 P. M., which was followed by a business meeting.

Minutes of the last meeting were read and approved.

William A. Ventimiglia, M. D., of Togus, Maine, was elected to membership.

Resolutions on the recent death of J. Frederick Hill, M. D., of Waterville were read by John O. Piper, M. D., and it was voted that a copy of those resolutions be spread on the records of the Kennebec County Medical Association, and a copy be sent to the bereaved family.

The speaker of the evening was William E. Browne, M. D., Surgeon-in-chief of the Second Surgical Service of the Carney Hospital, Boston, Mass. His subject was *Diagnosis and Treatment*

of Infection of the Forearm and Hand. This was a very interesting and instructive talk. Dr. Browne showed a moving picture of his operation for Dupuytren's contracture.

There were forty-two members and guests present.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary.

Piscataquis

A meeting of the Piscataquis County Medical Association was held in Legion Hall, Guilford, Maine, May 15, 1941, at 2.30 P. M.

It was voted that a special meeting be held at Moosehead Lake some time this summer, to which we should invite our neighboring County Associations.

George E. Young, M. D., of Skowhegan gave a most instructive talk on *The Comparison of Our Physical Findings in Diseases of the Thorax with What Is Seen in the X-Ray Film*. This was illustrated by slides and X-ray pictures.

N. H. NICKERSON, M. D.,
Secretary.

Washington

A meeting of the Washington County Medical Society was held at the Allan House, Dennysville, Maine, May 15, 1941, at 7.30 P. M.

The President being absent in U. S. Service, the meeting was called to order by Vice-President P. J. Mundie. Report of the Secretary was read and accepted. A nominating committee was appointed by acting President Mundie as follows: Drs. D. F. Bennett, W. J. Gilbert and W. H. Bunker. They reported the following:

President, Perley J. Mundie, Calais.

Vice-President, Herbert H. Best, Pembroke.

Secretary-Treasurer, James C. Bates, Eastport.

Censors: Norman E. Cobb, Walter J. Gilbert and Oscar F. Larson.

Delegate to Maine Medical Association, Norman E. Cobb. Alternate, James C. Bates.

The Censors presented the names of Mason Trowbridge, M. D., of Lubec and Clement L. Donahue, M. D., of Quoddy Village, Eastport, for membership, and they were unanimously accepted.

It was voted that the officers appointed at this meeting hold office until the Annual Meeting in 1942.

A joint meeting of the Hospital Staff of Calais Hospital and the Washington County Medical Society was voted to be held at the St. Croix Hotel at 6.00 P. M., May 23, 1941.

Respectfully submitted,

OSCAR F. LARSON, M. D.,
Secretary.

New Members Cumberland

Ralph E. Williams, M. D., Freeport, Maine. (By transfer from the Androscoggin County Medical Society.)

Kennebec

William A. Ventimiglia, M. D., Togus, Maine.

Washington

Clement L. Donahue, M. D., Quoddy Village, Eastport, Maine.

Mason Trowbridge, M. D., Lubec, Maine.

Councilor Reports

Report of Councilor, First District

To the Officers and Members of the Maine Medical Association:

Annual Report of the Cumberland and York County Societies:

CUMBERLAND COUNTY

Active Membership	164
Honorary Membership	7

New Members — James M. Parker, M. D., Portland; Reynold G. E. Ulpts, M. D., Portland; Kenneth E. Smith, M. D., Portland; Henry B. Finks, M. D., Portland; C. Lawrence Holt, M. D., Portland; Paul V. Davis, M. D., Bridgton; Victor L. Szanton, M. D., Jackman Station; G. E. C. Logan, M. D., Portland; George C. Poore, M. D., Portland; Ralph E. Williams, M. D., Freeport.

Deceased — Timothy J. O'Sullivan, M. D., Portland; Louis A. Derry, M. D., Portland; Frank W. Lamb, M. D., Portland; Howard Hamblen, M. D., South Windham.

Officers — President, George O. Cummings, M. D., Portland; Vice-President, Samuel G. Sawyer, M. D., Cornish; Secretary-Treasurer, Eugene E. O'Donnell, M. D., Portland. Board of Councilors: George A. Tibbetts, M. D., Portland; Henry M. Swift, M. D., Portland; Luther A. Brown, M. D., Portland. Legislative Committee: Charles B. Sylvester, M. D., Portland; Eugene E. O'Donnell, M. D., Portland. Committee on Outside Relations: Roland B. Moore, M. D., Portland; Harold V. Bickmore, M. D., Portland; Roderick L. Huntress, M. D., Portland.

Delegates to the State Medical Society — Franklin A. Ferguson, M. D., Portland; Frank A. Smith, M. D., Westbrook; Edward A. Greco, M. D., Portland; Elton R. Blaisdell, M. D., Portland; Phillip H. McCrum, M. D., Portland; Clyde E. Richardson, M. D., Brunswick; Richard S. Hawkes, M. D., Portland.

Alternates — Deforest Weeks, M. D., Portland; Louis L. Hills, M. D., Westbrook; Alvin M. Ottum, M. D., Portland; Francis W. Hanlon, M. D., Portland.

The following *Society Meetings* were held:
May 23, 1940—Lafayette Hotel.

Clarence Little, M. D., of the Jackson Memorial Library, Bar Harbor, Maine, discussed the Cancer Control Programs, as carried out in various States, and what this State may do to develop a good program.

November 1, 1940—Lafayette Hotel.

George Gilbert Smith, M. D., of Boston, Massachusetts. Guest speaker who addressed the Society on the subject, "Urinary Tract Infections."

December 20, 1940—Lafayette Hotel.

Speaker James Toumey, M. D., of the Lahey Clinic, Boston. Subject, "The Diagnosis and Treatment of Low Back Pain."

January 3, 1941—Eastland Hotel.

This was a joint meeting with the Maine Pharmaceutical Association. There were one hundred and fifty physicians and druggists present. The meeting was addressed by Harry S.

Noel of Indianapolis, Indiana, who chose as his subject "The Relation Between Physician and Pharmacist."

March 28, 1941—Eastland Hotel.

Speaker, Champ Lyons, M. D., Boston, Mass. Subject, "Heparin and Chemotherapy in Staphylococcal Bacteremia."

May 2, 1941—Eastland Hotel.

Speaker, Edward B. Benedict, M. D., Boston. Subject, "The Use of the Bronchoscope, Gastroscope and Peritineoscope."

The attendance was good at most of the meetings, and the subjects were well discussed. Dry Clinics were held at the Maine General Hospital at 5 P. M., on the days of the meeting. These Clinics are extremely popular and are well prepared by the Staff of the Hospital.

YORK COUNTY

Active Membership	51
Honorary Membership	2

New Members — L. Dean Webber, M. D., Kittery; John T. Guy, M. D., Eliot; William B. O'Sullivan, M. D., Biddeford; Pliny A. Allen, M. D., York Harbor; William F. Corbett, M. D., Sanford; John C. Myer, M. D., North Berwick.

Deceased — Edward C. Cook, M. D., York.

Officers — President, Owen B. Head, M. D., Sanford; Vice-President, Carl E. Richards, M. D., Alfred; Secretary-Treasurer, Charles W. Kinghorn, M. D., Kittery. Board of Censors: Joseph R. Larochette, M. D., Biddeford; Edward M. Cook, M. D., York; Paul S. Hill, Jr., M. D., Saco.

Delegates to State Medical Society—Carl E. Richards, M. D., Alfred; Paul S. Hill, Jr., M. D., Saco; Charles W. Kinghorn, M. D., Kittery.

Alternates—James H. Macdonald, M. D., Kennebunk; William H. Kelly, M. D., Sanford; Edward M. Cook, M. D., York.

The following quarterly meetings were held:

The annual summer meeting was through some misunderstanding overlooked.

Fall Meeting, October 9, 1940. Hotel Thacher, Biddeford, Maine. Guest speaker, William J. Brickley, M. D., Medical Examiner, Suffolk County, Mass. Subject, "The Cause and Manner of the Squalus Deaths."

Winter Meeting, January 8, 1941, American Legion Hall, Kittery. Speakers: Attorney Ralph G. McCarthy, Portsmouth, N. H.; Dr. Stephen A. Cobb, Sanford, Maine. Subject, "Selective Service." Entertainment: Entertainers from Radio Station WHEB, Portsmouth, New Hampshire.

Spring Meeting, April 2, 1941, H. D. Goodall Hospital, Sanford. Panel Discussion, "Endocrine Dysfunctions." James Carswell, Jr., M. D., Camden, Maine; Paul A. Jones, M. D., Union, Maine; H. L. Appolonio, M. D., Camden, Maine.

This has been a very good year with the County Society. Meetings were well attended, and the programs were instructive and entertaining.

Respectfully submitted,

STEPHEN A. COBB, M. D.,
Councilor, First District.

Report of Councilor, Second District

To the Officers and Members of the Maine Medical Association:

ANDROSCOGGIN COUNTY

The Society held eight regular meetings during the past year. The program for six of these was furnished by members of our own Society; two by guest speakers from Boston. One of the latter included an all day meeting with clinics at the two local hospitals; the other included an outing and banquet at Poland Spring with an evening program.

We began the year with 75 members. One member was lost by death; another by removal from the State. Five new members were added, making a total of 78 at the end of the year.

The attendance was slightly better than during the previous year, but still continues too small.

OXFORD COUNTY

Report of the activities of the Oxford County Medical Society for the past year.

Due to the fact that the Bingham Associates have monthly clinics during the winter there has only been one regular meeting which was on October 30, 1940.

At that time following officers were elected: President, Joseph A. Villa, M. D., So. Paris; Vice-President, Albert P. Royal, Jr., M. D., Rumford; Secretary-Treasurer, J. S. Sturtevant, M. D., Dixfield.

Committee on Legislation, D. M. Stewart, M. D., So. Paris.

Delegates to Maine Medical Association, H. M. Howard, M. D., Rumford; R. E. Hubbard, M. D., Waterford.

Alternates to Maine Medical Association, J. L. Bean, M. D., Norway; D. E. Elsmore, M. D., Dixfield.

Councillors, D. M. Stewart, M. D., So. Paris; L. M. Corliss, M. D., West Paris; R. R. Tibbetts, M. D., Bethel.

Norman M. Jackson, M. D., Andover, was elected to membership.

B. L. Ames, M. D., Farmington, Supervisory Health Officer for the Androscoggin, Franklin and Oxford counties, gave an account of his duties.

Everett D. Kiefer, M. D., Lahey Clinic, gave a lecture on "Management of Peptic Ulcer."

There are 37 members and 2 honorary members in good standing.

All dues were paid before April 1st and the Maine Medical Association rates the county 100% on the collection of dues.

FRANKLIN COUNTY

Report of the activities of the Franklin County Medical Society for the past year:

April 29, 1940—A dinner meeting of the Society at which George L. Pratt, M. D., and C. C. Weymouth, M. D., spoke briefly.

E. W. Gehring, M. D., of Portland was the main speaker and gave a paper on *The Life of William Hunter*. Also, Doctor Gehring read a tribute to the late Doctor John Nichols.

August 17, 1940—The annual outing of the Society was held at Doctor Weymouth's farm in Freeman at which Thomas A. Foster, M. D., President of the Maine Medical Association, spoke briefly.

December 2, 1940—The annual meeting of the Society with election of officers: President, Frank L. Springer, M. D., Farmington; Vice-President,

James W. Reed, M. D., Farmington; Secretary-Treasurer, Lorrimer M. Schmidt, M. D., Strong.

Delegate to Maine Medical Association, George L. Pratt, M. D., Farmington.

Alternate, Cecil F. Thompson, M. D., Phillips.

Board of Censors, C. C. Weymouth, M. D., James W. Reed, M. D., Maynard Colley, M. D.

100% paid-up membership for 1941.

EUGENE M. McCARTY, M. D.,
Councilor, Second District.

Report of Councilor, Third District

To the Officers and Members of the Maine Medical Association:

Lincoln County has never had a Medical Society. Because of the small number that would make up the average attendance it has not seemed feasible.

Of late several young men have moved into the county who were interested in becoming members of a Medical Society. Inasmuch as Sagadahoc County seems the most convenient with which to affiliate, satisfactory arrangements were made, and a request to discontinue the Sagadahoc Medical Society in name and substitute the name Lincoln-Sagadahoc Medical Society was placed before the Council at its winter meeting. The vote of the Council was unanimously in favor.

The Knox County Medical Society has held the usual number of meetings with a very satisfactory attendance. The meetings have been held in the evening following a teaching clinic at the Knox County General Hospital in the afternoon. The speakers and subjects have been selected in advance which stimulated very free discussions by the local men. I believe this to be an excellent plan for small societies.

WILLIAM ELLINGOOD, M. D.,
Councilor, Third District.

Report of Councilor, Fourth District

To the Officers and Members of the Maine Medical Association:

As Councilor of the Fourth District, comprising the Counties of Kennebec, Somerset, and Waldo, I submit the following report:

County meetings in this district have been regularly held and interesting programs provided throughout the year.

Attendance at the meetings has been excellent. New men have been added to the membership lists in each county, and all in all the Fourth District has had a pleasant and profitable year.

CARL H. STEVENS, M. D.,
Councilor, Fourth District.

Report of Councilor, Fifth District

To the Officers and Members of the Maine Medical Association:

Hancock County has had seven meetings since June, 1940, including one Clinical Session at Bar Harbor Hospital. All meetings were well attended and the Clinical Session is to be repeated this July, due notice of which will appear in a later issue of the JOURNAL.

Washington County Medical Society has had no meetings, but a business meeting is to be held at Dennysville, May 15th, at 7.30 P. M., at which time the Society will be re-organized or at least a full slate of officers will be elected and arrangements made for regular meetings to be held in the future.

Respectfully submitted this 9th day of May, 1941.

OSCAR F. LARSON, M. D.,
Councillor, Fifth District.

Report of Councillor, Sixth District

To the Officers and Members of the Maine Medical Association:

It gives me great pleasure as Councillor for the sixth district to report the healthy condition of the three northern Medical Associations.

During the past year the Penobscot County Medical Association held eight regular meetings. The membership is 89. Average attendance at meetings is better than 50%. Meetings are held regularly from October until June, on the third Tuesday of the month.

At this time it seems only proper that we should take some notice of those who have entered the armed service of their Country and thus have been forced to leave their homes and private practice. The following members of the Penobscot County Medical Association are now in the Army: Herbert T. Clough, Jr., Lawrence M. Cutler, Walter R. Gumprecht and Harold E. Pressey.

The excellence of the Fall Clinical Session held at the Eastern Maine General Hospital last fall speaks loudly for the high standing of the Penobscot County Association. Among those to whom we are especially indebted for the success of this session are Allan Woodcock, Henry C. Knowlton, Herbert C. Scribner, Allan Craig and Forrest B. Ames. Those who attended pronounced this one of the best Fall Clinical Sessions ever held.

The Aroostook County Medical Association holds but two meetings per year. It has 42 members. Average attendance at meetings is about 47%, an excellent attendance considering the distance many must travel. One member, George Ebbett of Houlton, has entered the Army.

The Piscataquis County Medical Association holds four regular meetings per year by its constitution. In addition to the four regular meetings, it has since 1925 held a special summer meeting, and since 1930 it has invited the neighboring County Associations to a joint social meeting. This last year in addition to its five meetings the Association was invited to two clinics. These clinics were held because Frederick T. Hill, Chairman of the Committee on Graduate Education requested that we try it. The clinics were well attended and proved so instructive that it is easy to prophesy that next year they will hold more. None from Piscataquis County have entered the service. Membership in the Association is only 18. Attendance at meetings averages better than 75%. Beat it if you can!

N. H. NICKERSON, M. D.,
Councillor, Sixth District.

Committee Reports

Standing Committees

Legislative Committee

The Legislative Committee took an active part in only one Bill, to wit, The Act to Create a Cancer Control Bureau. The measure was passed by both Houses of the Legislature and became a law. It is appended to Dr. Warren's report. The Committee was authorized by the Council to inform Senator Townsend that the results of a questionnaire to the profession favored the Pre-Marital Examination Bill which was passed.

The Committee believes that a majority of the members favor a Basic Science Law. At a meeting of the Council attended by the Committee on Public Relations and Mr. Locke, the advisability of sponsoring such a bill was discussed at length. It was the expressed opinion of those present that the Association would not be able at the present time to convince the legislators of the necessity for enacting such a law. Consequently, no bill was proposed. Moreover, the Committee believes that if any bill of this nature is contemplated in the future, a special steering committee should be appointed this year for organization.

Respectfully submitted,

THOMAS A. FOSTER, M. D., *Chairman.*

Committee on Medical Education and Hospitals

The total number of admissions in the sixty-two registered hospitals of Maine was 59,780, an increase of 1,492 over the previous year. This does not include 6,179 babies that were born in the general hospitals.

The average daily census of patients was 6,502. The per cent of acceptancy in general hospitals was 70%.

The total number of beds in all hospitals was 7,513, an increase of 34 over the previous year. There are in the general hospitals 3-4 beds per 1000 of population.

The larger hospitals all report overcrowded conditions. The Eastern Maine General Hospital at Bangor completed a new 70-bed hospital and added an obstetrical division to the main hospital. The Queens Hospital at Portland proposes to build a new 150-bed hospital. The Maine General Hospital is now adding 27 beds.

The problem of adequately meeting the cost of hospital care for the medically and economically indigent is still one of the most urgent problems confronting the hospitals today. This year the Legislative Committee of the Maine hospitals succeeded in getting the Legislature to increase the Hospital Aid Fund from \$200,000 per year to \$300,000. While this gives the hospitals some additional revenue, it will still be far short of the required needs of the hospitals, when one stops to consider that the hospitals have been receiving but \$1.30 per day per patient, and have an average per capita cost of over \$7.00.

Some hospitals have been unable to get the required number of interns this year because of the large number of interns going into military service and the increased demand for interns. Another year will work an increased hardship

with hospitals because it is not likely that the larger teaching hospitals will have a resident staff, and these men will have to be replaced with interns, thus shortening the supply of interns for the smaller hospitals.

Training schools are making a careful survey of all former graduates to determine their availability. There are many graduate nurses, married and otherwise, who have retired from active duty who would be available for hospital service. Refresher courses for nurses will be instituted this year to acquaint those who have not recently been active with the present techniques.

The Associated Hospital Service of Maine is just two and one-half years old. The Associated Hospital Service of Maine had 26,000 members as of May 1, 1941, and twenty-eight member hospitals. These hospitals possess 1800 beds for patients, or about 80% of all beds in non-governmental Maine hospitals eligible for membership in the Plan. Activities of the Association had not extended to Aroostook, Washington, Hancock and Oxford counties to the above date.

The Associated Hospital Service of Maine is one of 67 such organizations in the United States and Canada meeting the standards of approval established by the American Hospital Association for non-profit hospital service associations, and is the only such association in this State. Characteristic of such associations, the subscriber's benefits are received in service, not cash, and the service benefits are guaranteed by the member hospitals. The sick citizen needs service rather than cash at the time of his illness, and the community-sponsored hospitals are the agencies which have assumed the responsibility for providing the necessary care. Having rendered it, the hospitals need the cash and receive payment for the care of Plan subscribers directly from the Service Association according to a per diem rate schedule.

In the first four months of 1941, subscribers received 8,056 patient days of care under the Plan, 94% of which was provided in member hospitals in Maine. Hospitals valued the service rendered at \$56,252.32, for which \$48,635.34 was paid to the hospitals by the Service Association for contract benefits and the patients were billed an additional \$10,616.98 for elective use of private accommodations and other services. Collection delays and credit losses were thus eliminated for the member hospitals, considered as a group, on care rendered to patients participating in the Associated Hospital Service.

In March, 1941, the Association inaugurated an Essential Service Plan providing private-ward accommodations at reduced subscription rates. Nineteen hospitals participate in the new service.

ADAM P. LEIGHTON, M. D., *Chairman.*

Social Hygiene Committee

In October, 1940, the Social Hygiene Committee met with the State Department of Health to discuss the request of the United States Public Health Service for blood tests on registrants.

The Department of Health formulated a plan whereby the following data was obtained:

Of approximately 93,000 registrants, a total of 9,790 bloods were obtained for the Hinton test, and of these 116, or .011%, gave a positive reaction.

It is pleasing to learn of the low incidence of syphilis in the State of Maine.

The Department of Health is desirous of expressing its appreciation of the coöperation of the

Hospitals, Clinics and many private practitioners of medicine by which means blood was obtained from the registrants and sent to the State Laboratory.

BENJAMIN B. FOSTER, M. D., *Chairman.*

Cancer Committee

To the Officers and Members of the Maine Medical Association:

The members of the Committee appointed at the annual meeting of the Maine Medical Association, June, 1940, are as follows: Drs. Mortimer Warren, Portland, Chairman; Bertrand Beliveau, Lewiston; William Holt, Portland; Magnus Ridlon, Bangor; and Edward Risley, Waterville.

The representatives on this Committee are individuals identified with cancer work; each one is associated with a Tumor Clinic, and two are on the Executive Committee of the Women's Field Army. This complexion has been of advantage in embracing the viewpoint of coöperation in and integration of Professional, State and Lay activities.

At the Fall meeting of the State Association at Bangor on October 18th, an open meeting was held, at which time Dr. George C. Wilkins outlined the New Hampshire plan which is so successfully operating under his direction as Chairman of the New Hampshire Cancer Commission.

In November, 1940, the Council of the Maine Medical Association gave its support to any measure which would lead to a plan similar to the New Hampshire Commission. After much discussion, this Committee decided that more investigation was necessary before it could formulate such a definitive program, since it is just as important to know what not to do as to know what to do. It was, therefore, deemed advisable to sponsor a legislative bill which simply stated the problem and identified the Health Department as a partner in and administrative center for Cancer Control. This bill was sponsored by the Women's Field Army and by the Maine Public Health Association as well as by the Cancer Committee. Herbert E. Locke, Attorney of Augusta, handled the legislative and legal details. It was introduced by Senator Hildreth of Cumberland and was passed by the present legislature.*

It should be noted that this bill, though agreeable to and sponsored by the State Bureau of Health, was not of its seeking.

Dr. Roscoe Mitchell, Director of the Bureau of Health, has requested from the President of the State Association that the Cancer Committee serve as an advisory board in aiding him in the formulation of a plan of activity. It is incumbent on this present Committee to accept the responsibility so far as the program for the coming year is concerned. As a matter of future policy which may be considered established in principle by the above mentioned request of Dr. Mitchell, the structure of the Cancer Committee should be carefully considered. I suggest that future committees consist of five members whose tenure of office be staggered over a five-year period so that after its inception one member would retire and a new member would be appointed each year. For the coming year, members would be selected to serve for one, two, three, four and five years, respectively. A structure of this general nature does not disturb continuity of action but does allow introduction of new ideas, and spreads the responsibility over a broader base. Membership should be made up of those associated with cancer work

and should include, either by appointment or by invitation of the Committee, a member of the Executive Committee of the Women's Field Army and a physician who is a member of the Maine Hospital Association.

The present law carries no appropriation. The Bureau of Health, before the passage of this law, had incorporated in its budget the sum of \$10,000 each year for two years for cancer. Actual plans for allocation of this fund for particular purposes, or for determination of function of State and Lay activities, are not yet formulated.

I believe the general basic principles governing a Cancer Program may be expressed as follows, bearing in mind that whatever concerns the actual care and treatment of patients is entirely a professional responsibility:

- I. Lay education (coöperative endeavor of the State and Women's Field Army).
- II. Professional education; by means of a cancer manual or other material adapted for use by physicians, dentists and nurses, and by means of cancer seminars centered in the Tumor Clinics.
- III. Diagnosis and treatment (coöperative endeavor of the State and Women's Field Army):
 - a. Tissue diagnostic service through (1) the State and (2) approved hospital laboratories.
 - b. Tumor Clinics in General Hospitals:
 1. Diagnostic and therapeutic.
 2. Diagnostic.
- IV. Statistical research (Bureau of Health):
 - a. Morbidity.
 - b. Mortality.
 - c. Epidemiology.
 - d. Diagnostic and therapeutic facilities.
 - e. End results of therapy.
 - f. Uniform records.

Respectfully submitted,

MORTIMER WARREN, M. D.,

Chairman, Cancer Committee.

*** NINETIETH

LEGISLATURE

Legislative Document

No. 639

STATE OF MAINE

In the Year of Our Lord Nineteen Hundred
Forty-one

AN ACT to Promote Cancer Control

Be it enacted by the People of the State of Maine,
as follows:

P. L., 1933, C. I. Chapter I of the Public Laws of 1933 is hereby amended by adding thereto between sections 123 and 124 thereof the following section 123-B:

"Sec. 123-B. Cancer control. The department is authorized to make investigations concerning cancer, the prevention and treatment thereof and the mortality therefrom; and to take such action as it may deem will assist in bringing about a reduction in the mortality due thereto." (This is a copy of the Connecticut Law.)

Special Committees

Committee on Graduate Education, Year 1940-41

FREDERICK T. HILL, M. D., *Chairman,*
Waterville, Maine.

To the Officers and Members of the Maine Medical Association:

The Committee on Graduate Education submits the following report for the year 1940-41:—

As in previous years, the Committee has organized, and made available for program use of County Societies, a series of panel discussions, fairly comprehensive in scope. It has aided in the allocation of Fellowships for post graduate study, available through the Bingham Associates and the Commonwealth Fund. It has coöperated in the New England post-graduate Assembly, a most valuable addition to our educational program. While 38 members of our Association were in attendance at the Assembly last Fall, there was a notable absence of the younger men, who should have been present.

The Committee arranged for Teaching Clinics for members of the Association each week in Boston, as follows:—

Mondays — "Diabetes-Medical and Surgical Phases"—Dr. Joslin and Dr. McKittrick, New England Deaconess Hospital.

Tuesdays—"Head Injuries"—Dr. Munro, Boston City Hospital.

Wednesdays — "General Surgery" — Dr. Clute, Massachusetts Memorial Hospital.

Thursdays — "Perivascular Clinic" — Massachusetts General Hospital.

Fridays—"Traumatic Surgery"—Dr. Morrison, Boston City Hospital.

This past year the Committee has conducted a survey, designed to find out our needs in Graduate Education and how best to meet them. We believe that this has brought out information of considerable value, which can be used in developing a more constructive program for the future.

Early in the year a questionnaire was sent to each member of the Association. Replies were received from approximately one-half of the men in active practice, in the age group who could be expected to be interested in Continuation Education.

47% of those answering the questionnaires indicated that they had taken post-graduate courses during the preceding 5 years, 66% stated they had attended teaching clinics, 73% reported rather regular attendance at hospital staff meetings, while 24% said they attended National Scientific meetings, 92% indicated that they attended State or County Society meetings. Assuming that this group represents approximately one-half of those who could be expected to participate in a program of Continuation Education, and that those not returning the questionnaires are indifferent, we can conclude that 12% of our total membership attend National meetings; 46%, local meetings; 33%, teaching clinics and 37%, hospital staff meetings, while 24% have taken post-graduate courses.

A more detailed study of the returns reveals that for the most part the men who regularly attend the National meetings are following a better balanced and more comprehensive program of Continuation Education. The most encouraging feature is the relatively large number who attend

hospital staff meetings. It has been long recognized that the hospital staff meeting constitutes one of the best forms of Continuation Education, provided it is definitely teaching in character. Consequently it was decided to make a survey of the staff meetings in our hospitals; first, to ascertain the quality of teaching value therein, and, second, to suggest measures for improvement where indicated.

A letter was sent to the President of the Trustees, Chief of Staff and Superintendent of every hospital in the State calling attention to the importance of properly conducted staff meetings in improving the quality of medical service, and requesting the coöperation of each hospital in developing teaching programs.

A survey of the staff meetings of the 41 hospitals with organized staffs was carried out by members of the Committee. 13 of these hospitals hold no staff meetings, while two others hold meetings occasionally. 24 hospitals have monthly staff meetings, although many omit them entirely during the Summer. One hospital has bi-monthly meetings. Another carries on weekly staff meetings throughout the year. The teaching value of the

programs was considered good in 16, fair in 6 and poor in 6. Discussion was considered frank and constructive in 17, fair in 5 and poor in 6. Interest on the part of the staff was rated good in 17, fair in 6 and poor in 5. In 9 there was too great a tendency to limit case reports to the unusual or spectacular while in one the program was largely limited to statistical reports of the service cases. It was considered that meetings were run efficiently, with adequate physical equipment, in 17. 11 were lacking in this respect. 4 hospitals were found to be making definite efforts for improvement in the character of their meetings.

While these findings are quite encouraging it must be kept in mind that the appraisals were made by persons interested in and sympathetic to the institutions and hence were not highly critical. This applies particularly to the estimation of "teaching value." Nevertheless it is significant that 22 of our hospitals are at least endeavoring to furnish teaching programs for their staffs. The hospitals in this category are not confined to any one district but are well distributed over the State, as shown by the following table.

DISTRIBUTION OF HOSPITALS WITH EDUCATIONAL STAFF PROGRAMS—BY COUNTIES					
Androscoggin	2	Hancock	(fair) 1	Oxford	1
Aroostook	1	Kennebec	1	Penobscot	1
Cumberland	5	Knox	(fair) 2	Piscataquis	0
Franklin	1	Lincoln	1	Sagadahoc	1
				Somerset	(fair) 1
				Waldo	1
				Washington	1
				(St. Stephens)	
				York	(fair) 1 & 1

It is hoped that the number of hospitals holding regular staff meetings can be increased this coming year and the character of the meetings in all our hospitals improved in respect to teaching value. Careful selection of program material, frank and constructive criticism, and meetings conducted efficiently and on time, make for interest on the part of the staff and provide a valuable part of Graduate Education. In view of the results of the Committee's survey, we feel that this constitutes a most fertile field for the cultivation of an effective program of Continuation Education.

RECOMMENDATIONS:

1. The Committee recommends that all County Societies hold monthly meetings on regularly stated dates with carefully selected programs of educational merit. It will continue to assist County Officers in providing programs whenever desired, either with individual speakers or with panel discussions.
2. The Committee urges the use of the Fellowships for post-graduate study, available through the Bingham and the Commonwealth Funds, especially for the physicians in the rural districts.
3. The Committee recommends the continued participation of the Association in the New England Post-graduate Assembly, with a definite effort to increase attendance from our State.
4. The Committee further recommends that the Association, and its members, encourage and support in every way the development and extension of the teaching type of hospital staff meeting as a means of making our program of Continuation Education more effective and far-reaching.

The Chairman wishes to take this opportunity to express his appreciation of the constant interest and coöperation of Dr. Samuel R. Proger, Director of the Bingham Associates, and of Dr. Clarence L. Scamman, Medical Director of the Commonwealth Fund. Through these Funds, Maine enjoys a unique advantage which enables us to meet the problem of Continuation Education

for the rural practitioners which would otherwise be difficult of solution.

Respectfully submitted,
JULIUS GOTTLIEB, M. D.
EUGENE E. HOLT, JR., M. D.
FRANK H. JACKSON, M. D.
LEROY H. SMITH, M. D.
JAMES CARSWELL, M. D.
FREDERICK T. HILL, M. D., *Chairman.*

Committee on Maternal Health and Child Welfare, 1940-1941

The Committee has reviewed the maternal deaths in Maine for the year 1940, which totaled sixty-five, a rate of about 4.3 per thousand live births. This is an improvement over previous years, but is still higher than the rate for the other New England states. The number of deaths due to toxemia of pregnancy (23) is still far too high, indicating that there is room for improvement in prenatal care. Deaths attributed to sepsis following delivery numbered only six, an alltime low for Maine. It is noteworthy that of the 65 deaths, 10 followed Caesarean section, and also that of the patients delivered in institutions, somewhat over 6% were delivered by Caesarean. This makes one wonder if some of these operations were necessary, or if they were all done with proper indications.

While exact figures are not available for neonatal deaths during 1940, it is evident that the rate is considerably higher than it should be, in comparison with other states which might fairly be compared with Maine. An effort is to be made by the committee to follow up neonatal deaths more carefully, in order to determine what measures may be taken to correct this seemingly unnecessary high rate, whether it is due to faulty obstetrics or inadequate care of the new-born. The active coöperation of the State Bureau of Health is greatly appreciated, as in the past.

ROLAND B. MOORE, *Chairman.*

Report of the Secretary-Treasurer

To the Members of the Maine Medical Association:

There are 738 members in the Association; 715 active and 23 honorary. We have added to our roster during the past year 43 new members and have lost 19 through death. Five members were suspended in April for non-payment of dues, in accordance with our By-Laws, Chapter VIII, Section 1.

100% payment of 1941 dues have been received from the following County Societies: Aroostook, Franklin, Knox, Lincoln-Sagadahoc, Oxford, Penobscot, Piscataquis, Somerset, Waldo, Washington, and York.

The 1940 fall clinical session was held at Bangor. Instead of the usual two-day session the program opened with a dinner meeting at the Bangor House on October 17th at 8.00 P. M., with a full day clinical program at the Eastern Maine General Hospital on the 18th. A. N. Creadick, M. D., Associate Clinical Professor, Obstetrics and Gynecology, Yale University School of Medicine, guest speaker at the dinner meeting, spoke on *The Responsibility of Every Doctor to Provide Adequate Maternal Care*. Over 100 members attended the dinner meeting and 162 members and guests registered for the clinical program at the Eastern Maine General Hospital. The clinical program offered something of interest to everyone present and was, in every way, a complete success.

The 89th annual session will be held at the Marshall House, York Harbor, Maine, June 22nd, 23rd, and 24th. The program, to be found elsewhere in this issue, has been arranged by the Scientific Committee of which Herbert C. Scribner, M. D., of Bangor, is Chairman, and speaks for itself. The report of the Council for the year will be presented by the Chairman, Carl H.

Stevens, of Belfast, at the First Meeting of the House of Delegates on Sunday, June 22nd, at 4.30 P. M. Election of the President-elect will take place on Monday, June 23rd, at 5.00 P. M., followed by the Second Meeting of the House of Delegates at 5.30. The House of Delegates meetings are open to the entire membership.

The Association's Fifty-Year Service Medals will be presented at the dinner Monday evening to: William H. Bradford, Nathaniel H. Crosby, Lindley Dobson, George A. Gregory, W. Edgar Sincok, and Ernest A. White. The Association is honored in honoring these members who have "carried on" for fifty years.

The Commercial Exhibit is the largest in the history of the Association. The loyalty of the firms who have been with us for many years and the interest displayed by firms exhibiting for the first time justly deserves the appreciation and support of each and every member.

Because of the Maine General Hospital's need of all available space the office of the Maine Medical Association and JOURNAL will be moved to the Congress Building, Room 329, 142 High Street, Portland, on June 25th. I know that I express the sentiment of every member in extending to the Maine General Hospital our appreciation for having given us the use of the room we have occupied for the past eleven years.

The books of the Association and JOURNAL were closed and audited as of May 31, 1941. The Auditor's Report will be found elsewhere in this issue.

I wish, in closing, to express my appreciation to the county secretaries, councilors, and other officers of the Association, for their coöperation in carrying on the work of the Association during the past year. Also to the members who have helped to make this one of the best years on record.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

May 31, 1941.

Treasurer's Report

Chester A. Jordan
Harold C. Jordan

Members of American
Institute of Accountants

JORDAN & JORDAN
ACCOUNTANTS AND AUDITORS
Fidelity Building
Portland, Maine

May 31, 1941.

MAINE MEDICAL ASSOCIATION AND JOURNAL,
PORTLAND, MAINE.

Gentlemen:

We respectfully report that we have completed the audit of your accounting records for the fiscal year ended May 31, 1941, and have found the same complete and correct in all details of record. Statements annexed hereto are, in our opinion, properly drawn up to show the true financial position of the Association May 31, 1941, and the income and expense for the year under review.

Respectfully submitted,

JORDAN & JORDAN,
Accountants and Auditors.

MAINE MEDICAL ASSOCIATION AND JOURNAL

BALANCE SHEET, MAY 31, 1941

ASSETS

Cash in Banks	\$14,542.09
Accounts Receivable—Sundry	498.00
Dues Receivable	48.00
Advertising Receivable	441.71
Securities	7,005.00
Furnishings and Equipment	948.93
Impounded Cash	1,658.48
Deferred Expenses—Annual Meeting Expense	5.00
Total Assets	<u>\$25,147.21</u>

TRUST FUND INVESTMENTS

Prince A. Morrow Fund:—	
12 Shares American Agricultural Chemical Co. (Cost)	\$ 348.00
Savings Account No. 3905, Canal National Bank	552.82
Savings Account No. 54236, Fidelity Trust Co., Impounded	48.54
	<u> \$ 949.36</u>
Thayer Library Fund:—	
Savings Account No. 3903, Canal National Bank	\$ 966.75
Savings Account No. 54631, Fidelity Trust Co., Impounded	269.64
	<u> 1,236.39</u>
Total Fund Investments	2,185.75
Total Assets and Fund Investments	<u><u>\$27,332.96</u></u>

LIABILITIES AND CAPITAL

Deferred Income:—	
Exhibit Space—1941 Exhibit	\$ 774.50
Capital Account—May 31, 1941	24,372.71
	<u> \$25,147.21</u>

TRUST FUNDS

Trust No. 1—Prince A. Morrow Fund	\$ 568.52
Unexpended Income	380.84
	<u> \$ 949.36</u>
Trust No. 2—Thayer Library Fund	\$1,229.72
Unexpended Income	6.67
	<u> 1,236.39</u>
Total Trust Funds	2,185.75
Total Liabilities, Capital and Trust Funds	<u><u>\$27,332.96</u></u>

CAPITAL ACCOUNT, ONE YEAR ENDED MAY 31, 1941

Balance—June 1, 1940	\$24,359.94
Add:—Profit on Security Sold	\$35.00
Revenue in Excess of Expense One Year	62.77
	<u> 97.77</u>
	\$24,457.71
Deduct:—Fee Mr. Herbert Locke re 1941 Legislative Session, Paid from Capital Funds	85.00
Balance—May 31, 1941	<u><u>\$24,372.71</u></u>

STATEMENT OF REVENUE AND EXPENSE, ONE YEAR ENDED MAY 31, 1941

REVENUE

Dues	\$ 5,732.00
Income from Securities	315.00
Interest Received	198.60
Exhibit Space—1940 Convention	586.50
C. M. A. B. Advertising	2,432.78
Local Advertising	1,178.03
Subscriptions and Sales of JOURNALS	24.60
Total Revenue	<u>\$10,467.51</u>

EXPENSE

Salaries:—	
Dr. Jackson, Editor	\$1,000.00
Dr. Carter, Secretary and Treasurer	1,200.00
Mrs. Kennard, Assistant Secretary	1,500.00
Traveling Expenses:—	
President	300.00
Secretaries	112.87
Councilors	135.00
Office Expenses:—	
Office Assistants	117.25
Supplies and Stationery	241.90
Postage and Mailing Expense	219.03
Telephone	126.35
Auditing	56.67
Miscellaneous	77.69
Committee—Graduate Education	53.83
Committee—Hospital and Medical Care Survey	9.00
Clinical Session	221.84
Delegates—N. E. Medical Societies	32.75
A. M. A. Meeting	75.80
Medical Advisory Committee	541.84
Annual Meeting	730.79
Printing	3,449.46
Plates	178.17
Five Years' Service Bars	24.50
Total Expense	<u>10,404.74</u>
Revenue in Excess of Expense—One Year	<u><u>\$62.77</u></u>

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, ONE YEAR ENDED MAY 31, 1941

Cash in Banks, June 1, 1940	\$14,136.37
RECEIPTS	
Received from Dues	\$5,836.00
Income from Investments	513.60
Exhibit Space Rentals	488.50
Liquidating Dividend—Fidelity Trust Co.	47.83
Subscriptions and Sale of JOURNALS	24.60
Advertising	3,527.64
Sale of \$400.00 Mortbon Corp. Bond	435.00
	<u>10,873.17</u>
	<u>\$25,009.54</u>

DISBURSEMENTS

Salaries	\$3,700.00
Traveling Expenses	547.87
Office Expenses	838.89
Committees, Clinical Session and A. M. A. Meeting	452.88
Annual Meeting—1940 and 1941	733.84
Medical Advisory Committee	541.84
Printing and Plates	3,627.63
Five Year Service Bars	24.50
	<hr/> 10,467.45
Cash in Banks—May 31, 1941	\$14,542.09
Canal National Bank—Checking Account	\$3,197.27
Canal National Bank—Savings Account	1,895.40
Maine Savings Bank	4,524.73
Portland Savings Bank	4,487.52
First National Granite Bank	437.17
	<hr/> 14,542.09

SECURITIES—BONDS, ONE YEAR ENDED MAY 31, 1941

Description	Cost
\$2,000 Commonwealth of Australia, Ext. Loan 30 Yr. 5's, 1957	\$1,960.00
700 Prudence Bond Corp. 1st Mtge. Coll. Series 6, 5½'s, 1936 (Defaulted)	700.00
3,000 Portland Terminal Co. 1st Mtge. 5's, 1961	3,045.00
1,300 Mortbon Corp. of N. Y. Reg. Coll.	
\$400 June 1, 1946, B 5's	
400 1951, C 5's	
500 1956, D 5's	1,300.00
10 Shares V. T. Class A, \$1—Par	
	<hr/> \$7,005.00



For the local Treatment of Acute Anterior *Urethritis*
(DUE TO NEISSERIA GONORRHEAE)



Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA



Program

89th ANNUAL SESSION MAINE MEDICAL ASSOCIATION

JUNE 22, 23, 24, 1941

*THE MARSHALL HOUSE
YORK HARBOR, MAINE*

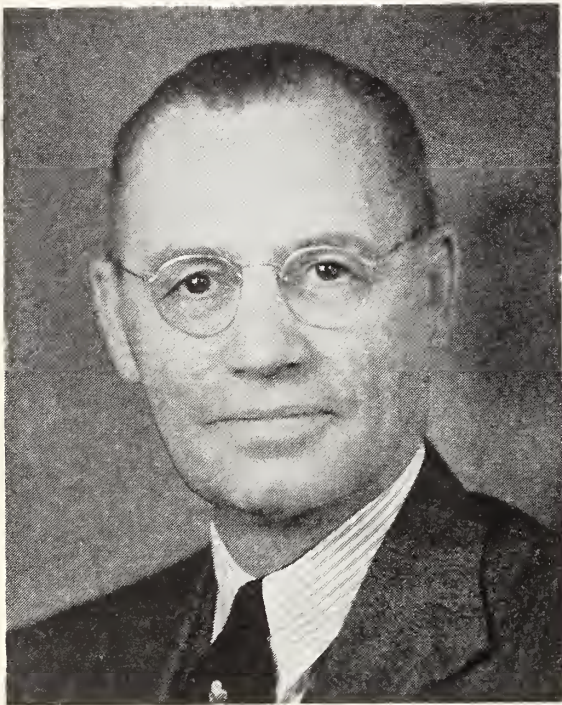
PROGRAM ARRANGED
BY THE
SCIENTIFIC COMMITTEE



HERBERT G. SCRIBNER
Chairman

Members

SCIENTIFIC COMMITTEE



GURRIER G. WEYMOUTH



EUGENE E. O'DONNELL



LEROY H. SMITH



FREDERICK R. GARTER, Secretary

Information

Registration headquarters will be in the Lobby of the Marshall House. Every member and guest is requested to register and receive a badge on arrival.

All emergency calls should be referred to the Association registration desk. Be assured that all emergency calls will be given prompt and efficient attention.

All papers read before this Association shall be its property for publication in THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION, and when read shall be deposited with the Secretary.

SUNDAY, JUNE 22, 1941

2.00 P. M.

Meeting of the Selective Service Board Examining Physicians.

John G. Towne, Brig. Gen., M. C. Ret.,
Medical Adviser, Selective Service Board,
presiding

4.30 P. M.

First meeting of the House of Delegates.

7.00 P. M.

Dinner.

8.30 P. M.

Entertainment for the Doctors and their wives.

MONDAY, JUNE 23, 1941

Morning Session

9.00 A. M.-9.20 A. M.

General Assembly,

President Thomas A. Foster,
presiding

Invocation,

Rev. W. H. Millinger, York

Announcements,

Herbert C. Scribner, M. D.,
Chairman, Scientific Committee
Frederick R. Carter, M. D.,
Secretary

9.30 A. M.-12.00 M.

Conferences

I

TRAUMATIC SURGERY

Chairman: Eugene M. McCarty, M. D.,
Rumford

- Daniel J. Lynch, M. D., Medical Director of the New England Telephone and Telegraph Company, Boston, Mass.
- Injuries to the Eyes from an Industrial Standpoint, E. Eugene Holt, M. D., Portland
- Hand Infections,
Garfield G. Defoe, M. D., Dixfield
- Round table discussion of Industrial Medical Problems.

II

CLINICO-PATHOLOGICAL CONFERENCE

Chairmen: Charles W. Steele, M. D.,
and Julius Gottlieb, M. D.,
Lewiston

Cardiac Lesions with Special Reference to:

- Bacterial Endocarditis—eight cases

Types: Healed following Chemotherapy
Pneumococci
Staphylococcus Aureus
Streptococcus Hemolyticus

- Coronary Lesions Studied by Injection Therapy. Relation of Circulatory Pattern to Repeated Coronary Injury and Prognosis.

- A Method for Coronary Volume Estimation, Its Clinical Significance,

(J. Gottlieb, M. D., and
J. Ostroff, M. D.)

Discussions opened by E. H. Drake, M. D., S. B. Proger, M. D., and W. J. Comeau, M. D., by invitation.

III

OBSTETRICS

Chairman: Theodore M. Stevens, M. D.,
Portland

- Ectopic Gestation,
Gordon N. Johnson, M. D., Portland
- Management of 500 Cases of Abortion,
Alvin E. Ottum, M. D., Portland
- Chemotherapy in Obstetrics,
Philip H. McCrum, M. D., Portland

IV

OTO-LARYNGOLOGICAL-PEDIATRIC CONFERENCE

Chairman: Frederick T. Hill, M. D.,
Waterville

- "Information Please" Panel Discussion of Oto-Laryngological Conditions in Children, Frederick T. Hill, M. D., Waterville
- Sinusitis in Children,
Warren E. Kershner, M. D., Bath
- Otitis Media and Mastoiditis in Children,
John E. Whitworth, M. D., Bangor
- Pharyngeal Condition in Childhood,
Maurice Brien, M. D., Lewiston
- Congenital Deformities of the Nose and Mouth, Charles H. Gordon, M. D., Portland
- Laryngeal Condition in Children,
Allan C. Hurd, M. D., Gardiner
- Bronchitis and Bronchiectases in Children,
Lloyd W. Bishop, M. D., Portland
- Allergic Conditions,
Edwin R. Irgens, M. D., Waterville
- X-Ray Diagnosis,
John P. Goodrich, M. D., Waterville

V

VITAMIN CONFERENCE (Open to the Ladies)

The Vitamins, What They Are, What They Do
For You, and Where You Get them,

J. Ernestine Becker, Specialist in Nutrition,
U. S. Dept. of Labor, Washington, D. C.

Luncheon

12.30 P. M.

Tables will be reserved for reunions of alumni of Boston University, Johns Hopkins, Bowdoin, McGill, Vermont, Tufts, Yale and Harvard Medical Schools, and members of the Tumor Clinics.

Afternoon Session

2.00-4.45 P. M.

SCIENTIFIC SESSION

- Introduction of Visiting Delegates.

2. A Study of the Slipping Rib Cartilage Syndrome,
John F. Holmes, M. D., Manchester, N. H.
3. Symposium on Vascular and Arterial Diseases:
 - a) Newer Knowledge Concerning Arterial Hypertension,
Laurence B. Ellis, M. D., Boston, Mass.
 - b) Medical Treatment of Arterial Diseases,
Burton E. Hamilton, M. D., Boston, Mass.
 - c) Surgical Treatment of Vascular Diseases,
Reginald Smithwick, M. D., Boston, Mass.
4. Review of Progress in Cancer Control,
Mortimer Warren, M. D., Portland,
Chairman, Cancer Committee

5.00 P. M.

Election of President-Elect.

5.30 P. M.

Second Meeting of the House of Delegates.

Evening Session

6.45 P. M.

President's Reception (Dress Informal).

7.00 P. M.

Dinner—Dance.

Presentation of Fifty-Year Medals by President
Thomas A. Foster

TUESDAY, JUNE 24, 1941

Morning Session

9.30 A. M.-12.00 M.

Conferences

I

Annual Meeting of the Maine Medico-Legal Society,*

President Franz U. Burkett, Portland,
Presiding

Officers for the coming year will be elected.
Interesting cases will be discussed.

* See Special Notices for more detailed program.

II

SURGERY

Chairman: Carl H. Stevens, M. D.,
Belfast

- a) Acute Head Injuries,
Allan Woodcock, M. D., Bangor
- b) Inter-Thoracic Lesions,
George E. Young, M. D., Skowhegan
(All cases presented will be actual cases
found in our own State.)
Discussion opened by William V. Cox, M. D.,
Auburn.
- c) Gall Bladder Surgery,
Harrison L. Robinson, M. D., Bangor
Discussion opened by Neil A. Fogg, M. D.,
Rockland.
- d) Gastric Surgery,
Isaac M. Webber, M. D., Portland
- e) Acute Intestinal Obstruction, Important
Points in Its Diagnosis and Treatment,
Harry Brinkman, M. D., Wilton
Discussion opened by William V. Cox, M. D.,
Auburn.

III

NERVOUS AND MENTAL

Chairman: Forrest C. Tyson, M. D.,
Augusta

Practical Aspects of the Modern Mental Hygiene Movement,

Henry B. Elkind, M. D., Medical Director of
the Massachusetts Society for Mental Hygiene

Discussion opened by Carl J. Hedin, M. D.,
Supt., Bangor State Hospital, Bangor.

IV

PUBLIC HEALTH

Chairman: Roscoe L. Mitchell, M. D.,
Augusta

1. Complete History of State Health Organizations in Maine.
2. Present and Future Programs.
3. Recent Legislation Affecting Health.

V

FRACTURES

Chairman: Henry W. Lamb, M. D., Portland,
assisted by Thomas A. Martin, M. D.,
Portland

Symposium on Problem Fractures.

Members attending this conference are urged
to bring X-rays of Problem Fractures for
a round table discussion to determine the
most satisfactory method of treatment.

VI

MEDICAL

Chairman: John O. Piper, M. D.,
Waterville

SIGNIFICANCE OF PAIN

1. Ocular and Mechanical Headache,
Howard F. Hill, M. D., Waterville
2. Headache from Medical Causes,
John O. Piper, M. D., Waterville
3. Significance of Chest Pains,
Charles W. Steele, M. D., Lewiston
4. Significance of Abdominal Pains,
Theodore E. Hardy, M. D., Waterville
5. Significance of Peripheral Pains,
Arthur H. McQuillan, M. D., Waterville
Discussion opened by John A. Wentworth,
M. D., Hartford, Conn.

Luncheon

12.30 P. M.

Tables reserved for Past Presidents and County Secretaries.

Afternoon Session

2.00-5.00 P. M.

1. President's Address,
Thomas A. Foster, M. D., Portland
2. An Attempt to Ascertain Clinical Value of
the Blood Sedimentation Rate, Based on
a Study of 500 Patients,
Elton R. Blaisdell, M. D., Portland,
and Kenneth E. Smith, M. D., Portland
3. The Spleen: Facts and Fancies,
William Dameshek, M. D., Boston, Mass.
4. Gastric Ulcer and Its Relationship to Cancer,
Arthur W. Allen, M. D., Boston, Mass.

Evening Session

7.00 P. M.

Annual Dinner (Dress Informal).

Address, Governor Sumner Sewall
Guest Speaker, Frank H. Lahey, M. D., President,
American Medical Association, Boston
Subject: Developments in Medicine, Economic
and Scientific.

Special Notices

Golf Tournament

All members of the Maine Medical Association are cordially invited to play in the Fourth Annual Golf Tournament at the York Country Club. Entries will be accepted for play either Monday, June 23rd, or Tuesday, the 24th.

Event 1. Championship: Low gross; winner will receive a prize in addition to having his name inscribed on cup for 1941. Prize for runner-up.

Event 2. Self-adjusted or "kickers" handicap. Five net prizes. Select your own handicap so that your net score will come as near as possible to a secret number between 70 and 75. Before beginning play post your name and handicap with starter.

U. S. G. A. rules will govern play except where modified by local rules. A player may enter both events by playing one complete round of eighteen holes and having score card, properly attested by partner, turned in to the chairman of the committee.

Sunday will be reserved for practice rounds.

Annual Meeting Maine Medico-Legal Society

The annual meeting of the Maine Medico-Legal Society will be held Tuesday, June 24th, at 9.30 A. M., at the Marshall House.

All Medical Examiners and County Attorneys and others interested are urged to attend.

Annual dues of \$1.00 may be sent to the Treasurer, W. S. Stinchfield, M. D., of Skowhegan, or paid at the meeting.

Program: Reports of Officers.

Election of Officers.

Discussion of new law by former Attorney General Burkett, and present Attorney General Cowan.

Presentation of an interesting case by William Holt, M. D., of Portland and County Attorney Knudsen.

William J. Brickley, M. D., of Boston, Medical Examiner for the Northern Division of Suffolk County will be present and talk to us on some subject to be determined later. Doctor Brickley is a very interesting talker and everyone should be there.

GEORGE L. PRATT,
Secretary.

Fifty-Year Service Medals

Medals will be presented, at the dinner Monday evening, to the below listed members in recognition of the service which they have rendered during fifty years spent in the practice of medicine.

Lindley Dobson, M. D., Presque Isle (Aroostook County Society Member), Bellevue Medical College, 1891.

W. Edgar Sincock, M. D., Caribou (Aroostook County Society Member), Bowdoin, 1891.

William H. Bradford, M. D., Portland (Cumberland County Society Member), Bowdoin, 1891.

George A. Gregory, M. D., Boothbay Harbor (Lincoln-Sagadahoc County Society Member), Bowdoin, 1891.

Nathaniel H. Crosby, M. D., Milo (Piscataquis County Society Member), University of Vermont Medical School, 1891.

Ernest A. White, M. D., Columbia Falls (Washington County Society Member), Jefferson Medical College, 1891.

Scientific Exhibit

An exhibit to illustrate the progress in cancer control in the State will be held in Parlor "B".

To the Ladies!

Registration headquarters will be in the Lobby at the Marshall House. Please register and receive a badge on arrival.

Mrs. Thomas A. Foster, and Mrs. J. Calvin Oram of Portland, and Mrs. Edward M. Cook, of York Harbor, will be in charge of your entertainment and have an interesting and varied program underway.

Briefly: Monday morning, from 9.30 to 12.00, you are all invited to attend the Conference on *The Vitamins, What They Are, What They Do For You, and Where You Get Them*, to be conducted by J. Ernestine Becker, Specialist in Nutrition, U. S. Department of Labor, Children's Bureau, Washington, D. C.

Monday afternoon a Bridge tea will be held at the hotel.

For you who are "garden minded"—three large gardens at York Harbor will be open for your inspection at any time during the meeting.

If you enjoy visiting spots of historical interest, the Old Gaol-Old house, maintained as a museum at York Harbor, is open for inspection. Or the Sarah Orne Jewett House at South Berwick, only twelve miles from the Marshall House. Sarah Orne Jewett's father was Theodore Herman Jewett, President of the Maine Medical Association in 1877-1878.

Also there will be non-professional entertainment for the Doctors and their wives on Sunday evening at 8.30, the President's Reception Monday at 6.45 preceding the Dinner-Dance, and the Annual Dinner Tuesday evening at 7.00 o'clock.

We hope you will all make a very special effort to be present and help make our 1941 annual meeting the best ever.

A more detailed program will be presented to you on registration.

Convention Rates

The Marshall House York Harbor, Maine

The following Room Rates, which include all meals, will prevail:

Single rooms without private bath but with lavatory with hot and cold water....\$6.50 per day
Double room without private bath but with lavatory and twin beds....\$6.00 per day each person
Double and single room with connecting bath for three persons.....\$7.00 per day each person
Two double rooms with connecting bath for four persons.....\$7.00 per day each person
Double room with bath and twin beds for two persons.....\$7.00 per day each person
Single room with bath.....\$8.00 per day
The charge for non-registered guests for meals will be as follows:

Breakfast\$1.50
Luncheon\$2.00
Dinner\$2.50

Garage storage will be 50c per day. Outdoor storage parking space will be provided without charge.

Golf green fees will be \$1.00 per day. (one-half the regular fee).

Tennis 50c a day.

Make your reservations early!!

Official Delegates, 1941

State Medical Societies

Connecticut:

Stanley B. Weld, M. D., 179 Allyn St., Hartford.

Orville F. Rogers, M. D., 109 College St., New Haven.

Massachusetts:

Edwin D. Reynolds, M. D., 48 High St., Danvers.

Stuart N. Gardner, M. D., 24 Chestnut St., Salem.

New Hampshire:

A. P. LaFrance, M. D., Laconia.

Rhode Island:

Albert H. Miller, M. D., 28 Everett Ave., Providence.

Carl D. Sawyer, M. D., 182 Waterman St., Providence.

Vermont:

H. R. Crandall, M. D., Essex Junction.

County Medical Societies

Androscoggin:

Horace L. Gauvreau, M. D., Lewiston.

Merrill S. F. Greene, M. D., Lewiston.

Ralph A. Goodwin, M. D., Auburn.

Alternates:

R. N. Randall, M. D., Lewiston.

Otis B. Tibbetts, M. D., Auburn.

William H. Chaffers, M. D., Lewiston.

Aroostook:

Frederick L. Gregory, M. D., Caribou.

Harold E. Small, M. D., Fort Fairfield.

Alternates:

Albert B. Hagerthy, M. D., Ashland.

Frank O. Blossom, Caribou.

Cumberland:

Franklin A. Ferguson, M. D., Portland.

Ernest A. Greco, M. D., Portland.

Frank A. Smith, M. D., Westbrook.

Elton R. Blaisdell, M. D., Portland.

Philip H. McCrum, M. D., Portland.

Richard S. Hawkes, M. D., Portland.

Clyde E. Richardson, M. D., Brunswick.

Alternates:

DeForest Weeks, M. D., Portland.

Louis L. Hills, M. D., Westbrook.

Alvin M. Ottum, M. D., Portland.

Francis W. Hanlon, M. D., Portland.

Franklin:

George L. Pratt, M. D., Farmington.

Cecil F. Thompson, M. D., Phillips.

Hancock:

Marcus A. Torrey, M. D., Ellsworth.

Alternate:

Raymond E. Weymouth, M. D., Bar Harbor.

Kennebec:

Howard F. Hill, M. D., Waterville.

Samuel H. Kagan, M. D., Augusta.

Leon D. Herring, M. D., Winthrop.

Blynn O. Goodrich, M. D., Waterville.

Alternate:

George R. Campbell, M. D., Augusta.

Knox:

James Carswell, Jr., M. D., Camden.

Gilmore W. Soule, M. D., Rockland.

Alternates:

C. Harold Jameson, M. D., Rockland.

Charles B. Popplestone, M. D., Rockland.

Lincoln-Sagadahoc:

Philip O. Gregory, M. D., Boothbay Harbor.

Oxford:

Henry M. Howard, M. D., Rumford.

Roswell E. Hubbard, M. D., Waterford.

Alternates:

Johnson L. Bean, M. D., Norway.

Dexter E. Elsemore, M. D., Dixfield.

Penobscot:

Forrest B. Ames, M. D., Bangor.

Henry C. Knowlton, M. D., Bangor.

LaForest J. Wright, M. D., Bangor.

Ernest T. Young, M. D., Millinocket.

Alternates:

Charles H. Burgess, M. D., Bangor.

Hugh G. McKay, M. D., Old Town.

Arthur C. Strout, M. D., Dexter.

Martin C. Maddan, M. D., Old Town.

Piscataquis:

Harvey C. Bundy, M. D., Milo.

Alternate:

Nathaniel H. Crosby, M. D., Milo.

Somerset:

George E. Young, M. D., Skowhegan.

Waldo:

Foster C. Small, M. D., Belfast.

Alternate:

Eugene L. Stevens, M. D., Belfast.

Washington:

Norman E. Cobb, M. D., Calais.

Alternate:

James C. Bates, M. D., Eastport.

York:

Carl E. Richards, M. D., Alfred.

Paul S. Hill, M. D., Saco.

Charles W. Kinghorn, M. D., Kittery.

Alternates:

James H. Macdonald, M. D., Kennebunk.

Edward M. Cook, M. D., York Harbor.

William H. Kelly, M. D., Sanford.

Association Delegates to 1941 Annual Sessions

American Medical Association

William A. Ellingwood, M. D., Rockland.

Connecticut State Medical Society

Eugene E. O'Donnell, M. D., Portland.

Massachusetts Medical Society

Theodore E. Hardy, M. D., Waterville.

New Hampshire Medical Society

William T. Rowe, M. D., Rumford.

Rhode Island Medical Society

M. A. Torrey, M. D., Ellsworth.

MEMBERSHIP CARDS

Members must present membership cards before registering at the
annual session.

Commercial Exhibits at Eighty-Ninth Annual Session

Maine Surgical Supply Company, 10 Longfellow Square, Portland, Maine.

This will be the second opportunity to avail ourselves of the privilege of exhibiting at the State Medical Convention, being our second anniversary. We take this opportunity to thank all of our friends for the success achieved these past two years. It has been our pleasure to serve the Medical Profession of Maine, and we again look forward to meeting the members. May we extend to one and all a kind invitation to visit our exhibit, which we hope will be instructive as well as interesting.

Mead Johnson & Company, Evansville, Indiana.

"Servamus Fidem."

Mead Johnson & Company will exhibit several new products in addition to Dextri-Maltose, Pabulum and Oleum Percomorphum. They will also have on display various examples of the slogan "Servamus Fidem" — We Are Keeping the Faith.

Eli Lilly and Company, Indianapolis, Indiana.

Eli Lilly and Company will demonstrate the germicidal efficacy of "Merthiolate" (Sodium Ethyl Mercuri Thiosalicylate, Lilly) and the compatibility of the antiseptic with body cells and fluids. Other new and useful products will be featured.

The Coca-Cola Company, Atlanta, Georgia.

Coca-Cola will be served to the delegates with the compliments of The Coca-Cola Company.

Petrolagar Laboratories, 8134 McCormick Boulevard, Chicago.

Physicians are cordially invited to visit the booth occupied by Petrolagar Laboratories, Inc., who offer, in addition to samples of the Five Types of Petrolagar, an interesting selection of descriptive literature and anatomical charts. Ask the Petrolagar representative to show you the HABIT TIME booklet. It is a welcome aid for teaching bowel regularity to your patients.

General Electric X-Ray Corporation, 2012 Jackson Boulevard, Chicago.

We will exhibit an improved Electrocardiograph; a Portable X-ray Machine which may be used for light radiography and fluoroscopy; a single fluoroline illuminator for examination of X-ray films, which is of the thin type and may be used on a desk, in the wall or wherever desired.

E. R. Squibb & Sons, 745 Fifth Avenue, New York City.

A number of new and interesting Vitamin, Glandular, Biological and Chemotherapeutic Specialties will be featured in the Squibb Exhibit.

Well informed Squibb Representatives will be on hand to welcome you and to furnish any information desired on the products displayed.

Thomas W. Reed Company, 91 Massachusetts Avenue, Boston, Massachusetts.

We are pleased to announce that our Mr. John F. Walsh, Post Office Box 464, Waterville, Maine, will again be in charge of our exhibit at the Annual Convention of the Maine Medical Association to be held at the Marshall House, York Harbor, Maine, on June 22, 23, 24, 1941.

The Borden Company, 350 Madison Avenue, New York City.

Visit The Borden Company Booth to see infant foods made entirely from Board-of-Health-inspected milk and designed specifically for infant formulas. Biolac, the distinctive new *liquid* infant food, affords convenience, economy and optimal nutrition; it is sterile and requires simply dilution with boiled water to make a complete formula. Preparation of the whole day's feedings is done in only fifteen minutes. Beta Lactose is *nature's* carbohydrate in an improved, readily-soluble form. Dryco provides *formula flexibility* for every feeding problem. Also Klim, Merrell-Soule Products, and Irradiated Evaporated Milk.

Picker X-Ray Corporation, 300 Fourth Avenue, New York City.

Visitors to the Picker X-Ray Corporation's booth will see a fine example of a combination Portable and Mobile Shockproof X-ray Unit.

This apparatus is suitable either for general office use for horizontal or vertical radiography or fluoroscopy, and may be dismantled and packed into a suitcase" form of container for transportation to the patient's home.

There will also be on display a number of newly developed X-ray accessories and diagnostic opaque chemicals.

The P. J. Noyes Company, Lancaster, New Hampshire.

We are grateful for the opportunity of contributing in a modest way towards the success of the meeting of the Maine Medical Association. Joe E. Brown, Representative.

Surgeons' and Physicians' Supply Co., 761 Boylston Street, Boston, Massachusetts.

The Surgeon's & Physicians' Supply Company will show a complete new set of Ritter ear, nose and throat equipment. This set will consist of the chair, nose and throat unit, sterilizer, lamp and suction outfit. Our representative, Mr. Joy, with the Ritter factory representative, will be in charge of the demonstration. We will also show short wave equipment and new items of interest.

George C. Frye Company, 116 Free Street, Portland, Maine.

The George C. Frye Company extends a cordial invitation to the members of the Maine Medical Association to visit their exhibit at the forthcoming annual meeting.

There will be displayed and demonstrated new items of interest to the Surgeon Orthopedist and Internist. There will, also, be exhibited items of general interest.

Our Maine representatives, Mr. Sidney Cheney and Mr. Claude Lamson, will be pleased to welcome their many friends.

Philip Morris & Co., Ltd., 119 Fifth Avenue, New York City.

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject and problems on the physiological effects of smoking.

Lederle Laboratories, 30 Rockefeller Plaza, New York City.

Lederle Laboratories, Inc., will feature a display of their Hay Fever, Poison Ivy and Allergy products, together with selected pharmaceutical products and Globulin Modified Antitoxins.

Samples and literature will be available.

Tailby-Nason Company, Boston, Massachusetts.

Tailby-Nason Company of Boston will exhibit Nason's Palatable Cod Liver Oil, made in the company's own plants in the Lofoten Islands of Norway, romantic Land of the Midnight Sun.

Nason's oil is prescribed and recommended by leading pediatricians from the Atlantic to the Pacific for its high vitamin potency and unusual palatability.

In addition, this old established Pharmaceutical house will display several of the most recent developments of its research and pharmacological laboratories.

E. F. Mahady Company, Boston, Massachusetts.

John Wyeth & Brother, Inc., 1600 Arch Street, Philadelphia.

You are cordially invited to visit John Wyeth & Brother's exhibit in the lounge, where the following pharmaceutical specialties will be on exhibit:

Amphojel, Wyeth's Alumina Gel, for the management of peptic ulcer.

Wyeth's Hydrated Alumina Tablets

Beptron, Wyeth's beef liver and iron for the nutritional anemias.

Bewon Elixir, Wyeth's palatable appetite stimulant.

A-B-M-C Ointment, for the relief of arthritic pain.

Kaomagma, Wyeth's magma of kaolin and alumina, for the control of diarrhea.

B-Plex, Wyeth's B Complex Elixir.

The Doho Chemical Corporation, Makers of Auralgan, 58 Varick Street, New York City.

Animated Pathological Ear Exhibit.

The Auralgan Exhibit consists of a model of the human auricle four feet high, together with a series of twenty-four three-dimensional ear drums modelled under the supervision of outstanding otologists. Each of these drums depicts a different pathologic condition based upon actual case observation and prepared, in so far as possible, with strict scientific accuracy so as to be highly instructive and interesting to all physicians.

C. B. Fleet Co., Inc., Lynchburg, Virginia.

Phospho-Soda (Fleet) is a highly concentrated and purified aqueous solution of sodium phosphates. It is non-toxic, rapid but mild in action, without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction,

and for its thorough eliminating and cleansing action on the upper and lower intestinal tract.

Elmer N. Blackwell, 207 Strand Building, Portland, Maine.

Surgical Appliance Exhibit.

The most practical exhibit at this meeting each year is the BLACKWELL EXHIBIT. You can help most of your patients by using one of Blackwell's Supports, Trusses, Elastic Hosiery, Bust Slings or Arches. These corrective and protective supports are available for men, women and children, at low prices. See Mr. Blackwell at the exhibit, get the facts, don't miss this opportunity again this year. It's time you joined the list of doctors using supports. Make it an objective to ask Mr. Blackwell how you can profit by buying his appliances. Let us help you to keep men and women to work whenever a support is needed.

R. J. Strassenburgh Company, Rochester, New York.

Since establishing our business fifty-five years ago, we have been faithfully serving the Medical Profession, and number many loyal friends among Maine's physicians. Our line is a broad one, including distinctive specialties developed in our own Research Laboratories. Maxitate, the longest-lasting vasodilator (five to six hours) is a development of our Research Department. Visit our booth and get acquainted with our products and members of our sales staff who will be in attendance. When in the vicinity of Rochester, New York, be sure to stop at our Laboratories. We want you to see the rigid control that is exercised in making high quality Strassenburgh pharmaceuticals.

H. P. Hood & Sons, 500 Rutherford Avenue, Charlestown, Massachusetts.

The Hood Company for many years has pioneered in the development of a cleaner, safer milk supply, cooperating with the Medical Profession in perfecting ways and means to this end.

Their exhibit this year will portray the present effort to enhance the food value of dairy products by scientific herd feeding.

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*Presidential Address**

By THOMAS A. FOSTER, M. D., Portland, Maine

On a June day, probably not unlike this one, in the neighboring City of Portland, threescore and thirteen years ago, Dr. S. H. Tewksbury, a former President of the State Association, introduced a resolution which read as follows: That the President of the Association shall at each annual meeting subsequent to his election to office make communication to this society setting forth the state and condition of the Medical Profession in this State with such suggestions in relation to its improvement as he shall deem appropriate; and in case of default in delivering the same, he shall forfeit and pay to the Society the sum of fifteen dollars, provided always that if such President shall duly cause to be presented to the Society a copy of his anniversary dissertation, he may, if the society deem proper, be excused from delivering the same, but he cannot be exonerated from the fine of fifteen dollars for non-composing and presenting such dissertation, and a copy of such dissertation so presented shall be read to the Society by one of the Vice Presidents. Under this resolution there appears in the bound volume of "The Transaction," 1853-1868, in bold print, the word "Adopted." So far as I know it has never been unadopted. Therefore, you are going to receive the anniversary dissertation, and I am going to keep the fifteen

dollars, and, inasmuch as the Society has no Vice-President, I am going to read it.

It has occurred to me many times during the year that the President was not likely to hear about the faults of the Organization. He was like the trusting husband who heard the bad news last. However, I have not been entirely blind or totally deaf. In intimate groups, I have heard it said that County and State Societies were all right in their way but that they didn't do anything. They went through some motions, made some gestures at their meetings, adjourned, and that was the end of things. In visiting around the State, I have seen some pretty thin gatherings at County Meetings and have seen Members come late and leave early with no great display of enthusiasm either on coming or going. And I think I know something about the state of affairs in the Society throughout the State. And, despite the fact of hearing discouraging remarks and seeing indifferent attendance, I maintain that the Association does do something and that the members of the Association are interested in organized medical groups. If this were not so, we would not be here today at our 89th annual meeting. Registration 245 members. In order to strengthen my convictions which I want to transfuse into you, I have consulted the past records of the Society, and,

* Presented at the 89th Annual Session of the Maine Medical Association, at York Harbor, Maine, June 24, 1941.

I assure you, ladies and gentlemen, it has been a labor of love. No one of you could pore over the pages of the Transactions of the Maine Medical Association without gaining a warm affection and a glowing pride in the efforts and accomplishments of the Founders and early Members.

This is published as the 89th annual meeting, and correctly so according to the preserved records. I do not like to let this opportunity pass, however, without referring to the earliest history as recorded in Doctor James Spalding's book, "Maine Physicians of 1820." The good doctor says in his Introduction:

"Let me now proceed to state briefly the origin of the Maine Medical Society of 1820, to follow this with an account of the life of the Founder, then with a narrative of the careers of the original officers — and under origin he continues:

"*The Eastern Argus* of Portland for December 19, 1819, contained this notice: 'A Meeting of the Physicians of Maine will soon be called for, from a Member of the Massachusetts Medical Society residing in Kennebunk, with the Idea of forming a new Medical Society to begin with the Declaration of the Sovereignty of the State of Maine in 1820.'"

The notice was inserted by Dr. Samuel Emerson of Kennebunk (a member of the District Medical Society of York founded about 1811), whom Dr. Spalding entitles the Founder. The Meeting was held in 1820, legally incorporated in 1821. Dr. Nathaniel Coffin of Portland was elected President; Dr. Jonathan Page of Brunswick, Vice President; Dr. Samuel Ayer of Portland, Secretary and Treasurer. Meetings were held, often at Brunswick and Augusta, and continued until 1845, when the society dissolved. Let me again quote from Dr. Spalding's book: "One of the Chief difficulties may have been too much joviality on the part of some of the members. As for the habits of physicians of that era, I note that on one occasion in another society, one hundred members disposed of 42 bottles of Claret, 23 of Madeira, 41 of Cider, and 11 gallons of lemonade flavored with more or less Rum. Bad roads, also, must have prevented mem-

bers from regular attendance." The Doctor concludes: "If the members had held out a bit longer, the Railroads and the Prohibitory Law would have solved many difficulties about that time and there would have been no interregnum between the death of the Maine Medical Society in 1845 and the Foundation of the Maine Medical Association in 1853." This review of early history would indicate that the medical doctors of Maine have had a society for one hundred and twenty-one years minus eight when they were without a state organization. In spite of the fact that the original society disbanded in 1845, the doctors kept alive an interest in forming a State organization. And the very fact that 27 of them gathered at the Tontine Hotel at Brunswick on April 28, 1853, to secure a permanent organization of the medical profession in Maine is offered as evidence that these gentlemen felt that a Medical Society was important. Dr. James McKeen of Topsham was chosen Chairman, Dr. John D. Lincoln of Brunswick, Secretary, and Articles of Organization were adopted.

Article I reads as follows: "The Object of The Association shall be the promotion of Medical Science, and the regulation of the practice of Medicine and Surgery in this State; and this organization shall be known by the name of the 'Maine Medical Association'." Among the members signing the articles were Isaac Lincoln, James McKeen, Andrew J. Fuller, Alonzo Garcelon, N. R. Boutelle and John D. Lincoln.

The first duty consisted in choosing delegates to the Sixth Annual Meeting of the American Medical Association to be held in May, in New York City. Dr. T. G. Stockbridge of Bath, John Benson of Waterville and Alonzo Garcelon of Lewiston were selected. By what means these honorable gentlemen made the trip to the Great City and to what problems they gave their time, I do not find recorded in the Transactions. But the Maine Society was organized and became part of the American Medical Association in 1853. After the preliminary meeting in April, the first regular annual meeting of the present Association was held June 1st in Winthrop Hall, Augusta. Dr. Isaac

Lincoln, President, was in the Chair. A Constitution and By-Laws were read and adopted. Remarkable, it seems to me, is the fact that 82 Medical gentlemen signed the Constitution, paid a dollar and were declared members. Among them I find the name W. C. Robinson of Portland, grandfather of Dr. Carl Merrill Robinson, who practices in Portland today; Luke Hill of Biddeford; Alonzo Garcelon of Lewiston; A. J. Fuller of Bath.

The new Constitution created Section I. as follows: "This Association shall be known as The Maine Medical Association; the Object of which is mutual professional improvement, cultivation of friendly intercourse between its members, faithful support of regular and honorable practice, and prompt exposure, at all times, of the impositions of Charlatanry and empiricism."

These men had reason to believe that an association was worth their efforts. Moreover, they had the spirit to meet together, after slow and difficult journeys, and to take the time to organize a State Society. This much is clearly beyond doubt. But how much did the organization accomplish remains a question. Gentlemen, the records over the years from the Second Annual Meeting in Portland, 1854, June the seventh, up to the 89th Annual Meeting here at York Harbor in June, 1941, answer the question fully, abundantly and with pride and honor. The bound Transactions from 1853 to 1909, together with the bound Journals from 1910 to 1940, repose on the shelves of the Association office, silent monuments to the labors and accomplishments of our worthy forebears. I am going to try to bring before you today from those pages only a few of the sound, yes, *sound* and solid accomplishments of those gentlemen who believed in the Maine Medical Association and gave freely of their time, their efforts and part of their fortunes to make it a living thing.

They first of all compiled a Code of Ethics, which was mailed with a copy of the Constitution and By-laws to all members in good standing. This was not to be taken lightly, and if any of you have doubts as to the effectiveness, I refer you to the records for reports of treatment extended to vio-

lators. You will find no appeasement in their policies.

At the Fourth Annual Meeting they voted to examine gratuitously such cases of disease as may be presented at the next annual session. Several patients appeared, and a Committee examined them and recommended treatment. Did they not thereby establish free clinics and freely give their services to deserving patients without consideration of remuneration? About this time a Committee was appointed to confer with the Faculty of the Maine Medical School, at its next Commencement, with regard to the School. And Dr. Gilman Davies brought to the next annual meeting a partial report which covers over three pages of the Transactions, submitting a plan for a basis of reorganization of the School, which he believed would raise the character of the School with the profession and would make the course of instruction more thorough for the student. Among other things recommended were the appointment of Professorships in:

1. Anatomy and Microscopic Anatomy.
2. Theory and Practice of Medicine.
3. Materia Medica and Therapeutics.
4. Surgery and Surgical Pathology.
5. Chemistry.
6. Midwifery.
7. Medical Jurisprudence.

The report was accepted and the subject recommitted to the same gentlemen for further consideration. Following this action, the Faculty of the Medical School of Maine voted that the Medical Association of Maine be invited to elect two delegates, annually, to attend the examination of candidates of the Degree of Doctor of Medicine in the Medical School of Maine. The invitation was accepted, and the Association became responsible for a share in the education of young men who contemplated the practice of medicine.

In ten years, this association of medical men had manifested an active interest in the improvement of medical standards of practice, had, indeed, defended the standards with disciplinary action. They had agreed together to employ their experience and skill in examining and treating without remuneration deserving cases. They had expressed

a desire to share in the education of medical students, and had coöperated with the Medical School of Maine. It takes time, when an association meets only once a year, to put its resolutions into effect. But I submit that these gentlemen paid attention to the objects of their Society and were instrumental in moving their profession into useful fields.

In 1871, seventy years ago, the Catalogue of the Association carried the names of 279 medical gentlemen in good standing in the organization. The annual meetings at this time had developed excellent programs with careful Committee reports and thoroughgoing clinical papers. The Treasurer, Thomas A. Foster, had in hand \$393.46, and the meetings were fairly well attended. At the Fifteenth Annual Meeting, the President, Dr. S. H. Tewksbury of Portland, said: "It is hardly possible to exaggerate or overestimate the importance of a Society like the one with which we are associated." And he continues after some amplification of the merits of membership as follows:

"The profession are well aware that a general hospital is needed in this State and that there are hundreds within its borders that go out of the State for surgical operations and hospital relief that have the means to make this expenditure, while there are very many more that are passing weary days and nights of agony, debarred by poverty from receiving medical and surgical aid, and for whom no shelter is provided."

And he concludes a somewhat bulky paragraph with this exalted sentence: "For the good to humanity and for the honor to science, let there radiate from this assembled body such an influence as shall move the legislature and the hearts of wealthy and liberal men to contribute what lies in their power to aid in the establishment of this noble and benevolent enterprise."

Following Dr. Tewksbury's recommendation, a Committee for a general hospital was named, and I am going to read it:

Dr. J. T. Gilman, Portland
 Dr. I. T. Dana, Portland
 Dr. H. H. Hill, Augusta
 Dr. N. P. Monroe, Belfast
 Dr. J. C. Weston, Bangor
 Dr. William Swazey, Limerick

Dr. H. L. Wiggin, Auburn
 Dr. T. L. Estabrook, Rockland
 Dr. T. H. Brown, Paris.

I have read the names of the Committee in order to have you realize that the members thereof came from many sections of the state, forming a truly representative Committee of the Maine Medical Association. If, at this time, the doubters had prevailed, if indifference had clouded the gathering, that appointment of a Committee would have been an end to the project. Did doubt and indifference prevail? It did not, as all of you here today know. At the next session of the Legislature, a memorial was prepared and submitted for an act to incorporate a State General Hospital. It passed both Houses and on February 24th was approved by Governor Joshua L. Chamberlain. And Dr. Gilman in his report said: "Mr. President and gentlemen of the Association, much depends for a successful issue upon *our* individual efforts. If we will enter upon the work with a resolute will and persistent energy of purpose, there cannot be a shadow of a doubt as to the ultimate result, that we shall have, at no distant day, a Hospital which in its administration and appointments will compare favorably with kindred institutions of its Class, and be an ornament, an honor and a blessing to the State.'" Dr. John T. Gilman, a man to remember, was a Chairman of merit. He worked and he worked and he worked. And his work brought forth a hospital. In one of his reports in 1873, the good doctor made the following statement: "Gentlemen, the Maine General Hospital is your own child and in your hands, as it always has been—"

The above short history is offered as added evidence of the worthiness of a State Medical Society.

During this period and into the seventies, the Association published many reports of the Sanitary Conditions of Various Maine Cities, Dr. Frederick Henry Gerrish contributing one about Portland in 1877. Their interest awakened by these reports, they appointed a committee to coöperate with constitutional authorities to establish a State Board of Health. On the Committee one finds the names of Alfred Mitchell of Bruns-

wick and A. K. P. Meserve of Portland. But even these courteous and able gentlemen were not successful in convincing the legislature of 1877 of the importance of such a Board. But in 1885, at the 33rd Annual Meeting, the Committee of which Dr. F. H. Gerrish and S. H. Weeks were members reported the passage of the Bill to Establish a State Board of Health. Other matters confronted the members, and in 1883 Dr. George Brickett, then president, named a Committee on Registration Bill. Subsequently, this Committee presented an act to regulate the Practice of Medicine by Examination and Registration. Along with the Journey of this bill goes an interesting story. It passed in both Houses of the Legislature and was signed by the Governor and handed to the Secretary of State. Later on the same day, the Governor called for the Bill, drew two pen lines through his signature, and vetoed the same bill which he approved earlier in the day. The bill failed to pass over this delayed veto. The Association in 1887 appointed a Special Committee on Securing the Restoration of the Medical Registration Law, and the Committee employed counsel which advised them to proceed against the Secretary of State by mandamus in the Supreme Court. The opinion of the Supreme Court was obtained and it was, in substance, that the Governor acted within his rights when he changed his mind, and that the Medical Registration did not become a law of the State. Dr. Charles O. Hunt, in his orderly and rather lengthy "Historical Sketch of the Maine Medical Society" at the Fiftieth Annual Meeting, writes: "So we found out at last that we did not know as much about law as we thought we did about medicine, and it cost us \$800.00 and much perturbation of spirit to learn that fact." However, an "act to regulate the practice of medicine and surgery," passed in 1895, greatly aided in its passage by the Maine Medical Association, although not originating therein.

I have recounted accomplishments of our State Society during the first fifty years, mentioning several but not all. One, for instance, the passage of an Anatomy Act, which engaged the attention of the members

from the time of the Second Annual Meeting up to 1896, was an admirable example of the patience and perseverance of the organization. In opening my remarks, I stated my conviction that the Medical Societies did achieve things. Allow me to quote from Dr. Hunt's "Historical Sketch." Says he, in speaking of the Maine Medical Association: "That it has exerted a great influence not only on the profession of Maine, but on the general Public, I find on studying its records, abundant evidence." And in closing, he writes: "As we can look back on our past history with satisfaction, so we can look forward with confidence that the future has much that is good in store for us as an organization and as a profession."

Well, gentlemen, we are approaching the last decade of the second fifty years. Since the turn of the Century, the Association, under able leadership, has been making steady progress. The accomplishments of this period may not seem as dramatic as the ones in the early days, but they have been important. In 1907, during the Presidency of Dr. B. B. Foster, upon recommendation of the Committee on Reorganization, of which Dr. Owen Smith was Chairman, it was unanimously voted to adopt the Constitution proposed and in accordance with the plan offered by the American Medical Association. I believe that Maine and Virginia were the last two states to adopt the new proposals. Under the new organization, the members continued their labors on behalf of their profession, their patients and their communities. In this era, pleas were made for Sanatoria for treatment of tuberculosis, for inspection of school children, for adequate compensation for The Medical Expert. THE MAINE MEDICAL JOURNAL was launched as a Quarterly. Many of you men here know the story throughout these years. Of course you know the story.

I see many before me who have served well and faithfully to advance the Objects of our Association. Many of you have given vigorous efforts to improve the position of medicine in the State. Those efforts are recorded in the archives and are appreciated, I assure you, by those who are chosen to carry on the work. To the younger men, I

am pleased to say that the Association has gone along from strength to strength by the efforts of the older practitioners in this State, who deserve our genuine thanks.

Now, how does the Association stand at present? In the remaining few minutes at my disposal, I propose to give you that information. The last Roster carries 738 names; 715 active members and 23 honorary. This is an increase of sixteen members over 1940. We have lost nineteen members through death, and among the nineteen were stalwart, friendly, gallant gentlemen, whom we will miss.

We have fifteen County Societies at the present time. Fifteen rather than sixteen, because Sagadahoc and Lincoln Counties have joined hands to form the Lincoln-Sagadahoc County Society. This agreeable junction, unanimously sanctioned by the Council, seems to promise benefits to all concerned. The Membership Rolls of the County Societies vary numerically from eleven to one hundred and sixty-four. All Societies have a full list of officers properly elected according to the Constitution and By-Laws. And they have all had meetings during the past year. For an account of their activities, I refer you to the pages of the *JUNE JOURNAL*. We have a representative and coöperative Council which is ready at all times to consider conscientiously affairs of the Association. The Council, the County Societies and the members form the structure on which our organization rests. At present, it rests securely, but a weakness anywhere will injure its form and substance. It is incumbent upon all sections to prevent injuries.

We have a going journal, as you know. Dr. Jackson, from his shrine in Aroostook, edits it with his well-known force and vocabulary. And during the past year, the income from advertising, after paying all expenses for plates and printing, has produced a small balance. I have spoken of our structure and our organ of expression. And I take now the opportunity to speak of our permanent officers: Dr. Frederick R. Carter, Secretary and Treasurer, and Mrs. Esther M. Kennard, Assistant to the Secretary Treasurer, Assistant to the Editor, Assistant to the President, and Business Manager of the

JOURNAL. These two amiable people, I have learned, make the Association move and live and have its being. Their daily labors, and I mean daily, increase as the years pass, and the Association owes them unshakable loyalty and warmest thanks. As Treasurer, Doctor Carter has the Custody of Assets and Fund Investments of \$27,332.96, and the control over expenditures of \$10,404.74 last year. So well has he attended to his duties that we came through the year with revenue in excess of expenses of \$62.77. Withal, our monies in banks and Fund Investments, remains unshrunk and secure. As Secretary, he has kept the records and correspondence clear and complete and all relations with the American Medical Association on a proper basis. Mrs. Kennard has performed many tasks beyond her ordinary allotment. She has brought to the business-management of the *JOURNAL* the benefits of her experience with admirable tact and sagacity. And our last issue carried more advertising and reached more people than any previous issue.

You may wonder at this point what I have to say about the rank and file. Indeed, what I have to say is not unfavorable. Your work is best summarized by the achievements of the various Committees. Many of you have rendered service in this way. You have been represented on eight standing Committees and numerous special Committees. During this Meeting, we share with Dr. Scribner and the members of the Scientific Committee the fruits of their labors. During the year, we have reaped the benefits of the work done by Dr. Hill's Committee on Graduate Education. At the last Legislative session, the Cancer Committee, under Dr. Warren's leadership, sponsored successfully a bill to create a Bureau for Cancer Control. And every day, gentlemen, we carry on in our duties with a grateful appreciation of the help readily furnished by Dr. Robinson's Medical Advisory Committee. I could speak to you about the deliberations and programs of all the committees, but time for no man waits, and the hour for our Scientific program approaches. But, before passing on to a few suggestions, with which I will conclude this annual dissertation, allow me to touch on the subject of County Society officers, and

particularly County Society Secretaries. I touch on County Society Presidents lightly; they are sometimes not so young and sometimes not so active, but they preside at meetings, coöperate with the Secretary (by allowing him to do most of the work,) but they honor the Association by their interest and willingness to share the responsibility for a successful season. But the Secretaries, sometimes, I would like to touch on not so lightly. Those moments of blitz-krieging, however, soon give way to feelings of appeasement and even appreciation when I realize how much they do to keep us going. They have the great opportunity to enliven County Meetings into jolly, wholesome gatherings where wit and wisdom walk together and strength flows out to the State Society. They did well last year, but sometimes a President could wish for them to do better.

Five years in the Councils of the organization has convinced me that we have good purposes and sound objectives. Perusal of the records has strengthened my convictions. And I have given thought often to the problems which lie ahead. Already we have about thirty members now called from their homes to serve in the armed forces of our Country. One cannot doubt that there will be more to answer the call. We are proud of those who have enrolled, and we send them today messages of good cheer and congratulations on

their opportunity to serve their Country. We will miss them at home; their patients will miss them. The Association must close ranks, unite and carry on without murmurs of complaint. Tightening our ranks means harder work for everyone — more planning for future eventualities; more willingness to give time to Committee work and Society meetings.

With faith in the grace in your hearts and minds, and with due humility, I urge upon all more frequent attendance at County Society meetings, more devotion from any indifferent among you to your local and State health problems.

And from the experience gained during my past active years in the Association, allow me to make the following suggestions for consideration: (1) Regular and more frequent County meetings; (2) biannual reports from all committees; (3) a biannual meeting of the House of Delegates.

These recommendations are proposed as measures to benefit not only the individual members, but also to keep the work of the Association abreast the current of ever-moving medical events.

May I say in Webster's words, "The Past at least is Secure."

Gentlemen, let us all have faith and courage to make the future one of good report.

In certain parts of the body, disease conditions are best recognized by roentgenographic means. One place where the roentgenogram is indispensable, according to J. E. Lofstrom, M. D., and F. C. Jewell, M. D., of Detroit in *The Journal* of the Michigan State Medical Society for April, 1941, is in the diagnosis of non-tuberculosis lesions of the lungs; in a large percentage of cases, the roentgenologist can recognize the abnormality or pathology and in most others can contribute facts which, when coupled with the history and laboratory data, will lead to an accurate diagnosis. Chronic pulmonary lesions are very serious; directly or indirectly, they produce a high mortality rate

and should be suspected in any patient with pulmonary symptoms. Conditions which present the greatest diagnostic problems are: Passive congestion; chronic pneumonitis; chronic bronchitis; bronchiectasis; lymphoblastoma; pneumoconiosis; abscess; cystic disease of the lung and pneumocoele; pneumocystosis; infiltrative carcinoma, and bronchogenic carcinoma. The physician should familiarize himself with the salient diagnostic features of each as they appear on the roentgenogram. He must not, however, lose sight of the fact that a chest roentgenogram without an accurate history of the case is valueless.

*A Medical Analysis of a Second Series of One Hundred Operated Surgical Diabetics**

By E. R. BLAISDELL, M. D., F. A. C. P., Portland, Maine

In August, 1938, in an article, "Mortality in Surgical Diabetes in the General Hospital,"¹ the writer reported a medical study of one hundred operated cases. Attention was called to the possibility of an unavoidable higher mortality rate in the general hospital as compared to the special clinic. This was attributed in part to the sharing of responsibility among a larger number of attending physicians or surgeons, but more especially to the condition of the patient at the time of his arrival at the hospital. It was pointed out that service patients represent more than fifty per cent of the surgical diabetics in the general hospital, and that many of them living in the country several miles from a physician do not call for medical aid until they are acutely ill. This predisposes to a higher mortality rate, especially noticeable when dealing with acute abdominal emergencies and lesions involving the lower extremities.

The second series of one hundred surgical patients included all those treated from January, 1938, until October, 1940. None were discarded unless the diabetes was not severe enough to require insulin. The average age of all patients was 60 years, and the average daily insulin requirement was 46 units.

In this second series, there were eight deaths in comparison with sixteen deaths in the first series. This requires some explanation. In the first publication, forty-one amputations, none of which were below the knee, accounted for ten of the deaths; whereas in the present group there were only twenty-nine amputations and only seventeen of these were above or at the knee joint. At first glance, this speaks in favor of conservative surgery. This is not the true picture, however, as the remaining twelve amputations were performed for osteomyelitis and not for sloughing gangrene where conservative localized surgery is usually futile.

There were three deaths in the seventeen patients with amputations at or above the

knee joint. One patient, a woman, aged 50, had a septic temperature on admission and died of sepsis four days after amputation. Another patient, a woman, aged 74, with a badly infected gangrenous foot and an infected throat with double mastoiditis on admission, died of sepsis two days after amputation. The third patient was also a woman, aged 74, who was doing well following amputation when she developed on the third day strangulation of a large ventral hernia. Death resulted from surgical shock twelve hours after this was operated upon under spinal anesthesia.

Death resulted in one patient from drainage of a large retro-peritoneal abscess of unknown etiology. Both Hinton and Kahn tests were strongly positive. She was extremely uncoöperative and, although there was very little temperature elevation, refused to eat and died of exhaustion three weeks after operation in spite of regular daily intravenous feedings of glucose and saline balanced with insulin. There were two deaths from bronchopneumonia following appendectomy. One was a man, aged 65, who, with a ruptured appendix and a temperature of 102° on admission, expired two days after operation. The second patient, a woman, aged 63, died of bronchopneumonia on the fourth day after a simple appendectomy. In both instances the pneumococcus could not be found. Death occurred in a forty-eight year old woman who was doing well twelve hours after a large abscess of the thigh was opened when she suddenly expired. The clinical diagnosis was pulmonary embolism. An autopsy was not obtained. A man, 67 years of age, an uncontrolled diabetic for several years, who had refused insulin therapy and had attempted without success to keep sugar free on a poorly balanced low calory diet, died with symptoms of surgical shock about three hours after excision of a large carbuncle of the neck. He was apparently reacting satisfactorily when

* From the Medical Service, Maine General Hospital.

¹ Blaisdell, E. R.: Mortality in Surgical Diabetes in the General Hospital: A Medical Study of 100 Operated Cases. *The Journal of the Maine Medical Association*, 19:165 (August), 1938.

his extremities suddenly became cold, his blood pressure fell to zero and death occurred within one-half hour of the onset of the attack. There had been no excessive blood loss to account for the symptoms, and evidence of acute heart failure was absent. Although the operation was listed as an excision of a carbuncle, the surgeon stated that the only excising done was the removal of sufficient superficial slough in order to enable him to cut through the fascia below which there was a large amount of pus.

The general routine of medical treatment in this second series was the same as in the first series, namely, as follows: Unless an acute emergency existed, the patient was treated preoperatively for a few days during which time attention was given to diet-insulin balancing and the administration of fluids — at least 3,000 cc. daily unless contra-indicated. During the first forty-eight hours following operation, glucose in normal saline solution was given intravenously—usually morning and night. An attempt was made to moderately control any glycosuria at this time. With the exception of amputations which were in most instances done under spinal anesthesia and the intravenous feeding omitted, mouth feeding was started on the third day — in the form of liquid carbohydrate divided into six feedings, two in the morning, two at noon and two at night. From this point on, it was usually possible to keep the urine sugar free and the blood sugar well controlled with insulin. The diet was gradually increased to a maintenance level and sufficient insulin given to control the diabetes. With the acute surgical emergency, haste was frequently essential and much treatment had to be carried out within a short preoperative period. No patient was immediately operated upon who was in a moderate or advanced acidosis, or who was suffering from shock as the result of severe acidosis. It is interesting to see, however, how quickly the patient can be brought under safe control with frequent insulin administration and free use of saline and glucose solution intravenously with the additional aid of blood transfusion in the presence of shock. Following operation, the patient was watched closely for dehydration and the appearance of acetone bodies in the urine, both of which are of more importance

during the first forty-eight hours than the percentage of sugar in the urine. Following this period, in the majority of cases, it was possible to continue as in the uncomplicated case. In no instance did symptoms of coma or severe acidosis appear following the operation.

SUMMARY AND DISCUSSION

The medical management and results of treatment in a second series of one hundred surgical diabetics are discussed. The average age was 60 years, and only insulin patients were included. The mortality rate in this series was eight per cent, which probably more nearly approaches the average mortality rate we can expect than was the sixteen per cent obtained in the first series. In our earlier publication, we had a much larger percentage of leg amputations where the expected percentage of recoveries is felt to be less. However, perhaps we should consider that both the patient and the physician are becoming increasingly alert as to the importance of early hospitalization in lesions of the lower extremity in the diabetic.

The operations were listed under the following headings:

Hysterectomy,	2
Herniotomy,	8
Mastectomy,	5
Amputation (17 thigh amputations),	29
Incision and Drainage of Abscess,	12
Appendectomy,	5
Cholecystoduodenostomy,	1
Incision and Drainage of Carbuncle.	9
Excision of Carbuncle,	1
Cellulitis,	2
Prostatectomy,	5
Cholecystectomy,	5
Excision of Maxillary Gland,	1
Hemorrhoidectomy,	1
Excision of Rectal Fistula,	1
Tonsillectomy,	3
Removal of Rectal Polypus,	1
Ligation of Internal Saphenous Vein,	1
Excision of Adenoma of Axilla,	1
Drainage of Hematoma,	1
Radical Removal of Cancer of Rectum,	1
Repair of Cystocele and Rectocele,	1
Mastoidectomy,	1
Salpingectomy,	1
Enucleation of Eye,	1
Removal of Cataract,	1

ONE HUNDRED SURGICAL DIABETICS

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Lived	Died
No.	Age						
1.	63	Hysterectomy	50	None	Ether	+	
2.	72	Herniotomy	47	None	Ether	+	
3.	59	Mastectomy	24	None	Ether	+	
4.	55	Finger Amputation	30	None	Nitrous Oxide	+	
5.	49	Mastectomy	49	None	Ether	+	
6.	52	Herniotomy	45	Bronchopneumonia	Gas and Ether	+	
7.	58	Drainage of Retro-peritoneal Abscess	30	Syphilis	Ether		+
8.	16	Appendectomy	50	None	Ether	+	
9.	54	Mastectomy	41	None	Ether	+	
10.	72	Cholecystoduodenostomy	54	None	Ether	+	
11.	65	Excision of Carbuncle	76	None	Spinal	+	
12.	62	Mastectomy	34	None	Ether	+	
13.	41	Incision of Cellulitis of Neck	61	None	Ether	+	
14.	60	Incision of Cellulitis of Foot	58	None	Spinal	+	
15.	72	Transurethral Prostatectomy	30	None	Spinal	+	
16.	77	Incision and Drainage of Ischiorectal Abscess	82	None	Spinal	+	
17.	80	Excision of Carbuncle of Neck	20	None	Gas	+	
18.	18	Incision and Drainage of Abscess of Vulva	100	None	Gas	+	
19.	50	Mid-thigh Amputation	40	Septicemia	Spinal		+
20.	73	Incision and Drainage of Carbuncle of Neck	47	Impending Coma on Admission	Gas	+	
21.	74	Mid-thigh Amputation	95	None	Spinal	+	
22.	68	Transurethral Prostatectomy	35	None	Spinal	+	
23.	47	Herniotomy	30	Hernia Strangulated	Spinal	+	
24.	53	Herniotomy	53	None	Spinal	+	
25.	76	Cholecystectomy	40	None	Ether	+	
26.	65	Appendectomy	50	Bronchopneumonia	Gas and Ether		+
27.	67	Amputation at Knee	40	None	Spinal	+	
28.	76	Amputation of Toe	21	None	Spinal	+	
29.	80	Amputation at Knee	15	None	Spinal	+	
30.	67	Excision of Maxillary Gland	30	None	Gas	+	
31.	39	Hemorrhoidectomy	18	None	Spinal	+	
32.	38	Herniotomy	20	Hernia Strangulated	Spinal	+	
33.	40	Herniotomy	30	None	Spinal	+	
34.	74	Mid-thigh Amputation	85	Septic Throat and Double Mastoiditis	Gas and Ether		+
35.	43	Excision of Rectal Fistula	70	None	Spinal	+	
36.	79	Transurethral Prostatectomy	15	None	Spinal	+	
37.	44	Tonsillectomy	20	None	Local	+	
38.	73	Excision of Rectal Polypus	24	None	Spinal	+	
39.	60	Incision and Drainage of Foot	45	None	Spinal	+	
40.	74	Mid-thigh Amputation	55	None	Spinal	+	
41.	72	Transurethral Prostatectomy	28	None	Spinal	+	
42.	67	Mid-thigh Amputation	30	None	Spinal	+	
43.	80	Incision and Drainage of Carbuncle of Neck	25	None	Gas	+	

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Lived	Died
No.	Age						
44.	83	Hysterectomy	48	None	Gas and Ether	+	
45.	48	Incision and Drainage of Abscess of Thigh	30	Pulmonary Embolism	Spinal		+
46.	63	Amputation of Toe	38	None	Spinal	+	
47.	74	Amputation at Knee	54	Strangulated Umbilical Hernia	Spinal		+
48.	65	Amputation at Knee	83	None	Spinal	+	
49.	59	Incision and Drainage of Foot	74	Septicemia	Spinal	+	
50.	75	Amputation of Toe	21	None	Spinal	+	
51.	77	Incision and Drainage of Ischiorectal Abscess	76	None	Spinal	+	
52.	52	Incision and Drainage of Carbuncle of Neck	44	None	Gas	+	
53.	36	Herniotomy	41	None	Spinal	+	
54.	59	Incision and Drainage of Carbuncle of Thigh	35	None	Gas	+	
55.	57	Mastectomy	39	None	Gas and Ether	+	
56.	72	Ligation of Int. Saphenous Vein	33	None	Spinal	+	
57.	45	Excision of Adenoma of Axilla	40	None	Gas	+	
58.	9	Tonsillectomy	15	None	Gas and Ether	+	
59.	68	Transurethral Prostatectomy	26	None	Spinal	+	
60.	75	Incision and Drainage of Carbuncle of Neck	55	None	Gas	+	
61.	73	Mid-thigh Amputation	68	None	Spinal	+	
62.	63	Appendectomy	110	Bronchopneumonia	Spinal		+
63.	14	Appendectomy	46	None	Ether	+	
64.	67	Amputation of Toe	45	None	Spinal	+	
65.	63	Amputation of Toe	32	None	Spinal	+	
66.	61	Low-thigh Amputation	40	None	Spinal	+	
67.	58	Incision and Drainage of Abscess of Neck	41	None	Gas	+	
68.	77	Amputation at Knee	44	None	Spinal	+	
69.	54	Cholecystectomy	92	None	Gas and Ether	+	
70.	53	Herniotomy	40	None	Spinal	+	
71.	50	Tonsillectomy	32	None	Local	+	
72.	56	Incision and Drainage of Infected Toe	70	None	Gas	+	
73.	65	Amputation of Toe	36	None	Spinal	+	
74.	55	Amputation of Finger	26	None	Gas	+	
75.	15	Appendectomy	60	None	Gas and Ether	+	
76.	57	Amputation of Toe	51	None	Spinal	+	
77.	59	Incision and Drainage of Hematoma	15	Polycythemia Vera	Gas	+	
78.	73	Mid-thigh Amputation	30	None	Spinal	+	
79.	62	Incision and Drainage of Abscess of Neck	34	None	Gas	+	
80.	63	Excision of Cancer of Rectum	40	None	Spinal	+	
81.	77	Amputation at Knee	25	None	Spinal	+	
82.	64	Amputation at Knee	30	None	Spinal	+	
83.	54	Repair of Cystocele and Rectocele	22	None	Gas and Ether	+	
84.	47	Incision and Drainage of Perinephritic Abscess	44	None	Alypin	+	
85.	39	Cholecystectomy	70	None	Gas and Ether	+	

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Lived	Died
No.	Age						
86.	67	Excision of Carbuncle of Neck	100	Acute Congestive Heart Failure	Gas Ether		+
87.	76	Excision of Carbuncle of Back	76	None	Evipal	+	
88.	54	Amputation of Toe	92	None	Spinal	+	
89.	21	Mastoidectomy	60	None	Gas and Ether	+	
90.	40	Amputation of Hand	105	None	Gas and Ether	+	
91.	61	Mid-thigh Amputation	110	Pulmonary Embolism	Gas and Ether	+	
92.	60	Double Salpingectomy	40	None	Gas and Ether	+	
93.	63	Cholecystectomy	20	None	Gas and Ether	+	
94.	48	Incision and Drainage of Carbuncle of Thigh	52	None	Gas and Ether	+	
95.	52	Enucleation of Eye	40	None	Ether	+	
96.	75	Mid-thigh Amputation	60	None	Spinal	+	
97.	60	Incision and Drainage of Abscess of Thigh	45	None	Ether	+	
98.	40	Cholecystectomy	38	None	Gas and Ether	+	
99.	71	Mid-thigh Amputation	30	None	Spinal	+	
100.	70	Cataract	10	None	Local	+	

Medicine, in these days of national preparedness, is acutely aware of the necessity of keeping workers fit for industry. The prevention of industrial disease is most important, especially regarding those affecting the skin, for they comprise at least 60% of all occupational disorders.

Industrial dermatoses are those pathological conditions of the skin caused by occupation and ranging from simple discoloration of the skin to carcinoma. Occupational dermatitis (ergodermatites) is an inflammatory disease of the skin caused by irritants contacted at work.

Diagnosis of skin ailments often requires a history of the individual case to determine the offending irritant. Patch tests are useful where a minute amount of the suspected substance is kept for a time in contact with the skin. Treatment usually requires the sufferer to leave his work for a time. If a severe case, he should be sent to a hospital. Various dressings and solutions have been found useful, but prevention is far more important than any cure.

J. G. Downing, M. D., of Boston, in *The Journal of the Michigan State Medical Society* for April, 1941, continues by empha-

sizing that prevention involves widespread education. Industry must be educated to avoid, where possible, the use of harmful chemicals. The worker must be educated to be careful, particularly in cleansing operations, for most skin disorders are due to carelessness. The medical profession must also be educated to the seriousness of the situation, and so must State Legislatures, so that they can provide suitably for the worker's welfare and for his compensation while disabled.

Prenatal examinations should include a chest X-ray. In a study of 2,834 prenatal patients, 4% were found to have evidence of healed tuberculosis of which the patients were unaware.—HARVEY J. PERLBERG, M. D., *Amer. Rev. of Tuber.*, Feb., 1940.

It would seem that poverty and unusual stress and strain should be—more so than they frequently are—the guide-posts for case-finding programs.—MAX PINNER, M. D., *Amer. Rev. of Tuber.*, Sept., 1940.

"On the Nature of the Psychoses"

By MATTHIAS MARQUARDT, M. D., Augusta State Hospital, Augusta, Maine

Psychoses are not definitely definable disease entities. They are variations of mental behavior which present features of "strangeness" to the "normally" integrated person. "Normal insanity" begins when the emotions are aroused in an unusual manner when the total person is not prepared to calmly meet the requirements of the new situation suddenly thrust upon it from the environment. In our days we all can see, if we will, the results of mental contagion on a grand scale. By various methods, usually by graduated sentimentalism the mind of so-called normal people is "poisoned," reason is systematically confused and thrown into helplessness and panic. Some are able to muster up enough intellectual reserve to stem the tide and defend themselves against it. Some succumb and submit to fixation of the emotions into an unalterable trend of thinking and acting. As a consequence definite notions are experienced and if often enough repeated, will infect others with more or less success.

Sooner or later one may notice one or another kind of "strangeness" of behavior. This "strangeness" may be only "relatively strange" or it may be "strange" in relation to accepted social standards. The thus altered person often begins to wonder whether this new-awakening to new and different action is a stroke of genius or a streak of insanity. It probably is neither. What happened is what usually happens, matter which was unconscious previous to this new experience has suddenly been forced into consciousness and having become conscious it must be dealt with forthwith in one way or other. If the total person can keep a cool head he will neither be declared insane nor will he become a misunderstood genius. In these hours of distress the afflicted person wishes to enjoy the company of someone who has had similar experiences and responds similarly to their influences. Merely arguing and reasoning the various points is not enough, a feeling of empathy craves for acknowledgement and mutual response. If mental symphony cannot be

established, some sort of neurosis or some sort of psychosis may and often does result. In the case a psychosis develops it means that the alteration was brought about by certain mental activities which appear spontaneously out of the unconscious. They cannot be derived from consciousness, cannot be consciously grasped or fully understood nor can they be as yet successfully reverted by conscious methods consciously applied to the consciousness of the person thus afflicted. Mental contents which go into the generation of a neurosis can be integrated, consciously grasped, understood, and they can to some extent be consciously attacked, modified and led back into socially acceptable channels of behavior. In other words, the mentality of the person afflicted with some form of a neurosis is basically what we call normal, even though on the surface it may and often does appear marred by exaggeration of and disproportionate response to situational demands. In case of a psychosis one is impressed with a more or less definable strangeness of mental behavior. Nevertheless we venture to study the psychoses. From all the evidence we have been able to accumulate we judge that nothing that is produced in the human mind is completely outside of our human psychic range. Even the craziest idea that was ever expressed by man must derive from something within man, from some hidden root or prerequisite. We are not able to prove definitely that any one human mind contains anything the elements of which are not also present in any other human mind. Nor do we have any irrefutable evidence that some human minds contain something that predestines them to become insane.

In order to truly and fully evaluate the cause or purpose of a psychosis, everything about the person must be known and appropriately fitted into the total personality and the resultant behavior combination as it appears to the examining physician. At the present state of our knowledge this is not yet completely possible.

As commonly understood psychoses are

thought to be forms of behavior not acceptable to members of a normally functioning closed group of people which go to make up modern civilized society. This society demands from each member consistent and harmonious coöperation. In order to be able to comply with this demand the individual must be reasonably well integrated, that is, he or she must possess a well-rounded personality and a behavior pattern which is acceptable to all. Disturbances which produce variations from this acceptable norm may be caused by altered modes of thinking, feeling and doing. These disturbances in turn may be directly or indirectly caused by organic, that is, structural, chemical or metabolic variations, they may be due to functional alterations, or they may be due to mental, better called metaphysical influences.

When we exercise what we call ordinary common sense we imagine ourselves far removed from the environs of a mental hospital. Yet common sense is a combination of opinions expressed by ordinary people living in a certain locality under certain conditions. Not one of them may have the slightest trace of an idea that the consciousness of everyone of them could very easily be invaded, at least in part, by strange and dangerous consciously directed but unconsciously received activities.

Attempts at classification of the psychoses have been many. Since classification as such never cures a disease process, though a correct classification may help to separate disease groups into appropriate treatment groups, the old division into functional and organic is still good for most practical purposes. In the functional group are commonly included all phases of the manic depressive behavior disturbances and all phases of the schizophrenias. The organic group comprises all mental changes secondarily due to chronic structural brain changes, and those due to the absorption of poisons, toxins of various kinds.

Manic depressive psychosis is an affective behavior disturbance. It is characterized by depression at one time and elation at another. If the change from depression to elation occurs rather frequently, this form of psychosis may resemble what used to be called "circular insanity." However, the patient more frequently remains in either the depressed or

elated phase for several months at a time and then slowly or rapidly changes over into the opposite phase.

Under the influence of this feeling of depression the afflicted person loses interest in his work, his manners, his social activities. His appetite gradually lessens to a point nearing total abstinence. Life loses all interest and hope for a brighter future wanes toward despair. Thoughts of self-destruction to hasten his escape from what appears to him to be a vale of sorrow become the medium for meditation and often a man slides easily and softly away from his family, never to be met again alive.

The person who is under the influence of elation, who is in the manic phase is more brilliant, more ambitious, more talkative, more active in every way than usual. Nothing progresses fast enough to please him. His own speech is too slow to express his thoughts which force instant expression at an unusually rapid rate. Under the tremendous push of his thought, speech and actions, the man afflicted with manic excitement walks about rapidly, sings, whistles, argues, writes many and long letters, draws pictures, interferes with most everybody and busies himself with most everything. He eats rapidly and often large amounts, he sleeps little and often not at all for several days and nights, and appears to be almost indefatigable. If he is crossed or restricted in his activities he may become very aggressive, destructive, abusive, even homicidal. A previously existing playfulness and meddlesomeness may become a seriously dangerous activity, threatening life and property to a considerably high degree.

Investigations that were conducted in the hope to discover any definite etiological factors signally failed in practically all fields. Studies of endocrine and neurovegetative system functions, toxic, chemical, metabolic, they all led to no conclusive solution of the problem involved. At times it looked as if we were dealing with family characteristics. In certain families manic depressive psychoses or some of their many variants seem to persist through several generations. Actual sporadic outbursts of this form of psychosis may occur from time to time in members of so-called cyclothymic families, that is, families

in which one of the chief characteristics is of the extroverted type: pleasant, agreeable, self-assertive, aggressive, talkative, busy-doers rather than deliberate planners, socially active leaders.

Treatment of these patients is neither easy nor satisfactory. The depressed person requires a quietly sympathetic, reassuring environment. With loss of interest in every day activities, with the drive to accomplish things at a low tide, with joy of living near its lowest level, such a patient is practically incapable to respond to such methods of treatment as so-called "cheer-up" psychology. As long as this is possible the person must be quietly persuaded to wait upon himself as much as possible according to a simple regime of living. Contacts with people are best restricted to a few really understanding and truly sympathetic friends and relatives. Wherever possible the patient should be relieved of the obligation to make important decisions or initiate new activities. Appropriate measures to prevent self-injury or self-destruction must be inaugurated and maintained. Medical assistance may be appreciated: Benzadrine sulphate in doses of 5 to 20 mg. preferably early in the forenoon may be tried; if restlessness and sleeplessness is a troublesome problem Luminal gr. 1.5 to gr. 3 or Amytal gr. 1.5 to gr. 3 may be given at bedtime; in agitation half a tablet, gr. .75 ($\frac{3}{4}$) of either Luminal or Amytal once, twice or three times a day often relieve the patient of much of his anxiety, restlessness and tension.

In the active or excited phase sedation in the form of a continuously applied bath with the tub filled to the overflow level with water kept at 94° F. to 96° F. After one to several hours in this bath the patient is removed, dried and given an alcohol rub and put at rest in bed or on a couch. For restlessness at night, when baths do not produce sufficient sedation, Amytal grs. 3 to 10, or Luminal grs. 3 to 10 often produce satisfactory results. When the patient does not take kindly to medication, the doses above recommended may be given by hypodermic injection in the form of Sodium Luminal, grs. 2 to grs. 10 or Sodium Amytal grs. 3 to grs. 9. At no time should the patient be left without competent supervision. When the patient can no

longer be satisfactorily cared for at home he may have to be sent to a hospital properly equipped to give appropriate care.

Dementia praecox or schizophrenia is an aberration from socially accepted norms of behavior differing from anything known in human behavior requiring medical attention. It is usually believed that the symptoms as presented by the patient are the outward appearances of an inward struggle that has been going on for a long time and could no longer be suppressed. This struggle which goes on within the individual, both between his own emotional life and his intellectual life as well as between himself and society is thought to be based on incapacity or inability to adequately and appropriately adjust himself to the changing requirements of the environment. Instead of accepting the environment and its demands as given and adjusting himself to the needs of these demands by attacking presenting obstacles for the purpose of overcoming or removing them, like a normally acting person is expected to do, the person afflicted with schizophrenic tendencies submits to the pressure forced upon him by the environment without any outward signs of struggle, practices a sort of passive resistance to all stimulative influences. Instead of offering himself in active combat against assailing forces he chooses to intern or rather turn in, (i. e. interiorize his feelings and actions) and devote his time and effort to wishful thinking, fantasizing, day-dreaming, and finally to hallucination, all passive methods of defense. A person afflicted with schizophrenia does not respond normally to affect-waking external situations. Whether this is due to excessive preoccupation with himself or an alteration of view point as to relative importance of social function cannot be determined readily. Driven by hallucinatory stimulation he may be seen smiling, laughing, scolding, or he may express fear, anger, hate in various ways. Most schizophrenics lose interest in matters not directly concerning themselves at an early stage. Much of their erratic, unpredictable, inconsistent, apparently inexplicable and not readily understandable behavior is said to be based on a so-called ambivalence of the emotions. It resembles a panic. Many schizophrenic persons, at the be-

ginning of this psychosis experience some sort of awareness of impending catastrophical changes. This awareness seems to overwhelm the patient with great awe, fearful apprehensiveness, coupled with almost paralyzing feeling of helplessness. The conative, cognitive and affective functions of the personality are no longer able to express the sensations, feelings, wishes of the individual in an integrated fashion. Delusions and hallucinations of bizarre and fantastic nature still further torture the already tortured intellect. Ideas of reference, usually of a paranoid nature often still further complicate the problem.

The diagnosis of a fully developed case of schizophrenia presents not many difficulties; in its early stages even the most expert of experts can honestly disagree on many points with one another. Of prime importance in psychiatry is the personally obtained personal history of the life of the patient and the progress of the conflicts which finally led up to the development of the psychosis.

In the presence of excitement, the joyful, infectuous quality, which is usually an accompaniment of the manic excitement of manic depressive psychoses, is practically absent in schizophrenia. The presence of hallucinations can no longer be considered as a diagnostic point of schizophrenia; as we learn to better understand the development and the nature of delusion and hallucination we become more lenient in our interpretation and more correct in the true evaluation of their real significance. In the presence of stupor, muscular rigidity, muteness, it is well to refer to the history for possible after-effects of lethargic or equine encephalitis, influenza or other infective or toxic afflictions of the nervous system which are known to lead to feeling of depression and lethargy. When severe psychic shocks, such as the death of some revered person, a disappointment of some sort which is of serious import to the patient, an excessive sense of guilt which accumulated following a threatened or actual punishment for a transgression not acceptable to the family or society and so forth, investigation is of necessity limited almost entirely to the patient. Only he or she can express in one way or another the feelings which resulted from conflicts arising from such situations. If the

patient considers the feelings inexpressible even the most emphatic and most skillful investigation will fail to produce satisfactory results. All clues that could lead to the disclosure of the secret sources of the conflict are locked securely within the patient's organism, have become organized, and are not accessible to the examiner. Occasionally, after many months or years such patients may release some of this pent-up material during a transition period from one phase of the behavior characteristic of schizophrenia to another. Whoever is so fortunate to be present at such comparatively short periods is fortunate indeed because he has gained a quick glimpse into the patient's innermost self which may reveal much important material to the examiner seeking understandable connecting links in the chain of events ranging from normal to abnormal forms of behavior of that particular individual.

Schizophrenia is a serious problem whichever way we look at it. Some of the many difficulties governing the etiology and nature have been touched upon. Description of the treatment of schizophrenia is no less difficult than the description of any one of the many phases of this behavior peculiarity.

For many years most authorities showed a tendency to consider schizophrenia like a chronic disease, leading to gradual but certain deterioration with terminal exitus due to some intercurrent disease process. As we learn to more fully understand some of the more or less abnormal demands made by some parts of our super mechanized civilization, many of whose demands are definitely destructive to the individual, the more readily can we see a way in which help can be suggested and often given. The most common and most readily applicable therapeutic measure is hospitalization. Here various methods of therapy are applied, individually measured to the individual's immediate requirements. Frequently simple removal from an environment which has become unbearable to the patient relieves many of the gravest symptoms of disease. Sedatives in the form of the Barbituric Acid preparations in excitement in moderate doses; mild stimulants in the form of Caffein, Benzedrine Sulphate in small doses are often readily accepted and appre-

ciated. Many disturbed psychiatric patients bluntly and persistently refuse medication of any kind, except that expressly requested, because they are often afraid of poisoning. Recently several methods of active medical therapy have been introduced with more or less temporary success. Prolonged narcoses, produced by the administration of Sodium Amytal gave some favorable results. The Insulin shock treatment at the present writing seems to be the most promising treatment in carefully selected cases. Metrazol (cardiozol) convulsion treatment also promises to shorten the course of the afflicted in selected cases but does not appear to be in such favor as Insulin due to its more drastic nature and its rather greater dangerousness. More recently picrotoxin and electricity have been employed. The nature and result of these resemble somewhat Metrazol, but are said to be free from the anxiety which accompanies the injection of Metrazol.

The chief difference between the sedation and the shock method of therapy is that the former attempts to produce sleeplike oblivion from life's obligations and conflicts while the latter tries to remove the patient's attention from it by violent, shock-like means. Whenever physical life is threatened, emotional and mental life attempts to assert itself to its fullest possible extent. Often shocks may produce partial or total temporary reversal of the psychotic process.

Recoveries and socially acceptable improvements from functional psychoses vary from 25 to 85 percent of persons afflicted. The nature of the recoveries varies from fair to good. Any recovery with paranoid residuals in the behavior pattern and without

insight should receive special after-care, perhaps in the form of mental hygienic re-education and guidance specially adapted to each case in order to prevent explosive expressions of some latent antisocial tendencies which may have been dormant present before the establishment of the psychosis or may have developed from thought combinations which may have accumulated during the progress of the psychosis.

The organic psychoses are really behavior disturbances due secondarily to organic defects which may be due to toxic, infectious, metabolic, nutritional disturbances, which in turn may be the result of anatomical defects, functional changes due to the absorption of substances poisonous to the individual and the like. None of these defects are immediately reversible but frequently normal cerebral functions return when the toxic substances have been removed, or the anatomically correctable reparation have been fully completed.

Etiologically these psychoses are said to be due to a causative agent, such as psychoses due to alcohol or any other drug producing mental changes, psychosis due to syphilis or other disease processes and so on. The diagnosis is established by discovering the causative drug or the disease producing organism.

Treatment of the organic psychoses involves removal of the causative agent, correction of pathologies so far as possible, and re-education for life-sustaining activity. In other words the problem is essentially medical and at times surgical. Psychiatrically a special problem exists only during the comparatively short period of acute mental disturbance of these patients.

There's one liberty we have in a democracy we would be better off without—that's the liberty to be needlessly unhealthy. — PAUL BROOKS, M. D.

Fluoroscopic roentgenography has a definite place in finding significant tuberculosis. It is relatively inexpensive and more than reasonably accurate.—EZRA BRIDGE, M. D., *Amer. Rev. of Tuber.*, Aug., 1940.

Workers caring for patients with tuberculosis can only be shielded from exposure to infection by conscious and conscientious precautions. — EMIL BOGEN, M. D., and WM. DUNN, M. D., *Amer. Rev. of Tuber.*, March, 1941.

Adequate rest is still the basis of all therapy of tuberculosis.—CHARLES K. POTTER, M.D., *Contact*, Feb., 1941.

The President's Page

To the Members of the Maine Medical Association:

Another annual session of the Maine Medical Association is now a matter of history and speaking of history, after listening to our Past President's Address on the early history of the Association, we should certainly congratulate ourselves that we are practicing medicine today, rather than in those early days of the society.

Enough for the past. The session is over and was very successful from the viewpoint of a good program, though the attendance was far from what it should have been. Those who stayed home missed a treat. The program was excellent and the exhibit the best we have ever had. I presume you all know that the expense of running our annual meetings is largely taken care of by what the exhibitors pay for the space they use. If you do not show your appreciation of this by visiting them and registering, showing that you are interested, the exhibitors may feel that it does not pay them to attend, in which case the expense of conducting the meetings would fall wholly on the Association and as the expense is about \$700.00 a year and we have about 700 members, the dues might have to be increased \$1.00 a year to meet this deficit.

This year one of the exhibitors reported that less than 30 men registered at his booth. Can we expect him to come again? Let us try to do better next year so the exhibitors will feel it pays them to attend our meetings. It will take very little effort and time on your part to make every exhibitor glad he was present.

Now, as to the coming year, what can we do to improve conditions, to increase interest in medical problems and to unite all doctors more closely as members of your Medical Association,—I say your Association, for that is how you should feel about it. Do not think for a minute that your Officers and Committees can successfully run your Society without your coöperation. We desire suggestions: We desire constructive criticism (note I said constructive). Criticism that is not constructive is worthless. Constructive criticism is always valuable.

As I stated before, we had a good meeting but it would have been much better if the attendance had been larger. Two hundred and forty-five members registered at the meeting, that is, about one-third of our membership—not enough—at least 50% should attend. How can we get them to do so. Let us have your suggestions.

P. L. B. EBBETT, M. D.,
President, Maine Medical Association.



Carl H. Stevens, M. D., Belfast

The President-Elect

Those who know him—and what member of our association does not—know full well that Doctor Stevens is extremely well qualified for the honor so appropriately bestowed and well merits the selection of the association. As we look to our president for guidance and leadership he in turn must have the loyal support of every member of the Maine Medical Association. Concerted and harmonious coöperation means much for our professional betterment and the public we serve. To our president, Doctor P. L. B. Ebbett, to Doctor Stevens and the entire administration of the Maine Medical Association the JOURNAL tenders its congratulations and heartiest support. We sincerely hope that their terms of office will be pleasant, that they will realize on the completion of their work the satisfaction and knowledge that accrues

from more and better accomplishments. In commencing the work of 1941-42 it is a pleasure to extend thanks to all who have made possible the work of the last year. Committee, councilor and secretary reports have been published but by necessity they reflect in an extremely limited way of the loyal efforts expended. The excellent program provided by the scientific committee stands on its own record and to those business friends who were with us our grateful thanks. It means hard work, and lots of it, to conduct the business and professional side of the Maine or any other medical association—it can safely be said there is no substitute for it—so let us take up our assignments with confidence and a determination to live up in all ways to the motto of our state.

Editorial

As Others See Us

In an address delivered before the 1941 annual midwinter dinner of the Connecticut State Medical Society, Dr. Frank H. Lahey, now president of the American Medical Association, made the following statement: "I know these are critical times and times of criticism, and the thing that I have always said to myself when I have been criticised is that it is certainly a very definite indication to me that I should review some of my actions and some of my views and at least determine whether or not the criticism was justified. *And I feel very sure that is the situation as relates to organized medicine.* I don't think that organized medicine in any way ought to resent criticism. I think it ought to welcome criticism." Criticism, as is well known, can be constructive or destructive. One founded on an honest desire to point out ways in which changes may be brought about that are advantageous; the other influenced by unfair prejudice and employed as a means of obtaining personal ends and even for paying off fanciful or actual grudges.

Criticism, like a dose of oil, is sometimes hard to take but is often most salutary in results. Any one who followed the trial of the case of the Department of Justice against the American Medical Association and the District Medical Society of Washington must have been impressed with the fact that attorneys for the department emphasized the contention and laid great stress on the fact that organized medicine in its fight against G. H. A. was motivated by selfish and personal interests and as a result men of ability and integrity, duly licensed to practice their profession in the District of Columbia, merely because they were employed by this group, were discriminated against unjustly and unfairly and that as a result of such discrimination hospital and other privileges were denied and refused them. That this opinion is not shared exclusively by the De-

partment of Justice must be apparent when we read and hear direct and open criticism by members of the profession and even from patients.

If there is a legitimate basis for the criticism that the American Medical Association, State or County Associations or Societies are dominated and controlled by cliques composed mainly of specialists; that competent men are being denied the hospital privileges to which they are entitled; that the various certification boards have in many instances pursued a course arbitrary and unjust towards men whose skill and capacity is established with warrant in their various communities; that the general practitioner is finding his voice merely that of one in the wilderness and that a special society is required to protect his interests, further his educational demands and that to give him his place in the sun he must be certified; then simple common sense dictates that the sane and extremely pertinent advice of Dr. Lahey can very well be followed.

It is absolutely beyond the point that some of the criticism may be without fact or warrant; some of it may be. Medicine openly affirms its hostility to the closed shop methods of certain labour organizations, prides itself on the democratic manner with which its business is conducted but it must be remembered and remembered again that our aims, methods and reasons are not always understood by the public and they should be. If, under the guise of medical ethics and a professed aim in supplying the best possible medical service, we are accused of furthering the opportunities and advantages of our own members to the exclusion of competent and ethical men outside the ranks of organized medicine it is well to remember that in "these critical times and times of criticism" such charges or feelings cannot be dismissed with a wave of the hand.

Nominating Committee Report

The report of the Nominating Committee as presented and accepted at the Second Meeting of the House of Delegates at the 89th Annual Session of the Maine Medical Association at York Harbor, Maine, June 23, 1941.

Nominating Committee

George L. Pratt, M. D., Farmington,
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Carl E. Richards, M. D., Alfred.

Philip O. Gregory, M. D., Boothbay
Harbor.

Howard F. Hill, M. D., Waterville.

Norman E. Cobb, M. D., Calais.

Harold E. Small, M. D., Fort Fairfield.

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Forrest B. Ames, M. D., Bangor.

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C. Harold Jameson, M. D., Rockland.

Frank H. Jackson, M. D., Houlton.

Forrest B. Ames, M. D., Bangor.

The Secretary, ex-officio.

Legislative Committee

The President, ex-officio.

The President-elect, ex-officio.

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Public Relations Committee

R. V. N. Bliss, M. D., Bluehill, Chairman.

Frederick T. Hill, M. D., Waterville.

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Warren E. Kershner, M. D., Bath (1943).

Albert W. Plummer, M. D., Lisbon Falls
(1942).

Delegate to the American Medical Association for Two Years (1942-1943)

William A. Ellingwood, M. D., Rockland.

Alternate: Thomas A. Foster, M. D.,
Portland.

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Julius Gottlieb, M. D., Lewiston.

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Frank H. Jackson, M. D., Houlton.

LeRoy H. Smith, M. D., Winterport.

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George L. Pratt, M. D., Farmington (Sec-
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Warren E. Kershner, M. D., Bath (Third
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Edward H. Risley, M. D., Waterville
(Fourth District).

DaCosta F. Bennett, M. D., Lubec (Fifth
District).

Herbert E. Thompson, M. D., Bangor
(Sixth District).

Roscoe L. Mitchell, M. D., Augusta (De-
partment of Health and Welfare).

Committee on Maternal and Child Welfare

Roland B. Moore, M. D., Portland, Chair-
man.

Albert W. Fellows, M. D., Bangor.

County News and Notes

Aroostook

The annual meeting of the Aroostook County Medical Society was held at Houlton, June 10, 1941.

A clinical session was held at the Aroostook Hospital from three to six in the afternoon. Siegfried J. Thannhauser, M. D., Ph. D., Professor of Medicine at Tufts Medical College, Boston, was present.

The banquet was held at the Northland Hotel at 6.30 P. M.

The following officers were elected:

President: Harold E. Small, M. D., Fort Fairfield.

Vice President: Thomas G. Harvey, M. D., Mars Hill.

Secretary-Treasurer: Gerald H. Donahue, M. D., Presque Isle.

Board of Censors: Frederick L. Gregory, M. D., Herrick C. Kimball, M. D., and Frank H. Jackson, M. D.

Elected to membership were: Armand Albert, M. D., Van Buren, and Eugene G. Gormley, M. D., Houlton.

Guest speaker of the evening was Siegfried J. Thannhauser, M. D., of Boston. Thomas A. Foster, M. D., of Portland, President of the Maine Medical Association, was present and spoke on Society proceedings both past and present. E. H. Doble, M. D., of Presque Isle, presented a paper on *X-Ray Therapy in Treating Skin Diseases and Super Growths*.

THOMAS G. HARVEY, M. D.,
Secretary.

Oxford

The regular meeting of the Oxford County Medical Society was held at Bethel Inn, Bethel, Maine, May 21, 1941.

Following the business meeting a banquet was served at which forty members and guests were present.

At the evening session, Joseph H. Pratt, M. D., of Boston, gave a very instructive talk on *Home Treatment of Pneumonia with Sulfathiazole: a Report on 145 Cases*.

J. S. STURTEVANT, M. D.,
Secretary.

New Members

Aroostook

Armand Albert, M. D., Van Buren, Maine.

Eugene G. Gormley, M. D., Houlton, Maine.

Coming Meetings

Hancock

Hancock County Medical Society

*Welcomes all Physicians
to its*

*Annual Summer Clinic
at*

Bar Harbor, July 30th

The programme begins Wednesday morning at the Mount Desert Island Hospital with surgical and medical clinics, conducted by men with national reputations.

Luncheon at the hospital.

Several optional afternoon sessions, with arrangements for sight-seeing trips about the Island for those who are interested—especially the ladies.

Dinner at one of the resort hotels will be followed by the Scientific Session.

M. A. TORREY, M. D.,
Secretary.

Piscataquis

*Piscataquis County Medical Society
extends an invitation to all*

Members of the Maine Medical Association.

There will be a meeting of the Piscataquis County Medical Association at Squaw Mountain Inn in Greenville, July 24th. Dinner at 12.00 noon Daylight Saving Time. Ladies invited.

President P. L. B. Ebbett, and President-elect Carl H. Stevens will both be present. After dinner golf, bridge or a sail on Moosehead Lake for the ladies.

G. E. Haggart, M. D., of the Lahey Clinic, will speak on *Low Back Pain with Special Reference to Herniation of Intervertebral Discs*.

At the last meeting of the Piscataquis County Medical Association it was voted that we extend an invitation through THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION to all members of the Maine Medical Association.

N. H. NICKERSON, M. D.,
Secretary.

Change of Address

We again call your attention to our "Change of Address." Communications should be directed to the *Maine Medical Association* or *The Journal of the Maine Medical Association*, at 142 High Street, Portland, Maine, Room No. 329. We hope you will all remember that this is your office and avail

yourselves of any opportunity to call on us and get acquainted with your headquarters.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

ESTHER M. KENNARD,
Assistant Secretary.

Acknowledgement

The JOURNAL has allowed me this space to thank the many members who worked so hard to arrange and to carry to conclusion the annual meeting. I wish to thank particularly Dr. Herbert C. Scribner of Bangor, and his committee for their careful plans, patience and coöperation at all times. In addition I want to thank Dr. Edward M. Cook, Dr. Charles W. Kinghorn, and their associates from York County for their interest, attention and willingness to help in all ways during the meeting. And to Dr. William A. Ellingwood of Rockland, Dr. Stephen A. Cobb of Sanford, and Dr. Frank A. Smith of Westbrook, I wish to extend thanks for their attention to registration, guidance and entertainment of the Out-of-State delegates and speakers.

Mrs. Foster wishes me to express her appreciation for the help and support of Mrs. J. Calvin Oram, Mrs. Edward M. Cook, and others in carrying out the program for the entertainment of the ladies.

THOMAS A. FOSTER.

Notices

New Searle Laboratories To Be Built At Skokie, Ill.

The well-known pharmaceutical manufacturing house of G. D. Searle & Co., Chicago, announce

that work has been started on the building of their new laboratories and plant, which are located on the outskirts of Chicago, in the Skokie district.

The Searle Company does business in every State in the Union. Its products are stocked in the prescription department of all drug stores. Its research has already contributed many valuable new medicinal products which are generally prescribed by the physician. At the present time it has a seasoned research staff and several important research projects in progress which show promise of providing immense advances in certain medical fields.

Surgical Notes

The Holland-Rantos Company have been appointed exclusive distributors for Rantex, the newest development for surgical masks and caps—a patented fibre product which is insoluble in live steam, boiling water or common solvents. A magnification of Rantex shows that it is 176 times more protective than a single layer of gauze. As a result, it provides masks and caps which are exceptionally cool, comfortable, light and free from irritating lint or yarn. They are inexpensive enough to be discarded after a single use; yet they can be autoclaved or sterilized.

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Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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Book Reviews

"The Essentials of Applied Medical Laboratory Technic"

Details of How to Build and Conduct an Office or Small Hospital Laboratory at Small Cost

By: J. M. Feder, M. D., Director of Laboratories and Allergic Service, Anderson County Hospital, Anderson, S. C.

Blood and Plasma Transfusion

By: John Elliott, Sc. D., Pathologist, Rowan General Hospital, Salisbury, N. C.

Published by Charlotte Medical Press, Charlotte, N. C., 1940.

Modern medicine demands that a considerable amount of laboratory work be done. The authors of this volume have presented practically every laboratory procedure which is usually expected to be performable at any good small-hospital laboratory. The information given is plainly written so that the student laboratory technician and office nurse can readily understand it and with a little help should be capable of performing the usual routine tests and examinations. Only time-proven methods have been used in the making of this book and expensive and elaborate equipment is not absolutely needed.

"Physical Medicine"

The Employment of Physical Agents for Diagnosis and Therapy

By: Frank H. Krusen, M. D., F. A. C. P., Associate Professor of Physical Medicine, the Mayo Foundation, University of Minnesota; Head of the Section on Physical Therapy, The Mayo Clinic; Member of the Council on Physical Therapy of the American Medical Association; Past President of the American Congress of Physical Therapy; Past President of The Academy of Physical Medicine.

With 351 Illustrations.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$10.00.

This comprehensive textbook of physical medicine was written for the purpose of presenting the American medical student and practicing physician with a truly reliable authoritative modern concept and guide to the large and promising field of therapy with the aid of physical agents and

methods. At last the long felt need for such a text has been satisfied most admirably. Physical medicine or physical therapy includes the application of physical and mechanical agents such as light, heat, cold, water, electricity, etc., in their various forms and modes of application. This very excellent book will stimulate the interest of all practicing physicians because all of them are now employing some forms of the various simple physical therapeutic agents. Hereafter they will be able to employ them more often and with far more promise of success because the author of "Physical Medicine" clearly describes indications, contraindications, kinds and types of agents most appropriate in special cases, and techniques of application. Having knowledge of the correct agent and technique and properly selecting the patients for the prescribed treatment, possible therapeutic errors are reduced to a minimum.

"The Mask of Sanity"

An Attempt to Reinterpret the So-called Psychopathic Personality

By: Hervey Cleckley, B. S., B. A. (Oxon) M. D., Professor of Neuropsychiatry, University of Georgia School of Medicine, Augusta, Georgia.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$3.00.

This small volume is one of the plants which grows out of the seeds sown at staff meetings of large neuropsychiatric hospitals. The soil for it was provided by the so-called borderline cases among those mentally maladjusted people who for various reasons do not seem to fit into our normal social structure, nor can they be successfully re-educated by our various systems of education, nor can they be corrected by any of our penal or custodial systems.

At the hand of several interesting case records the author evolves a new theory of psychopathicity, recommends a new term, and suggests what he considers most appropriate methods of taking care of people suffering from this form of maladjustment. The book represents a great amount of research work. The subject is very well presented and all professional readers should receive very valuable pointers in recommending most appropriate care for this type of sufferer from social or semantic maladjustment.

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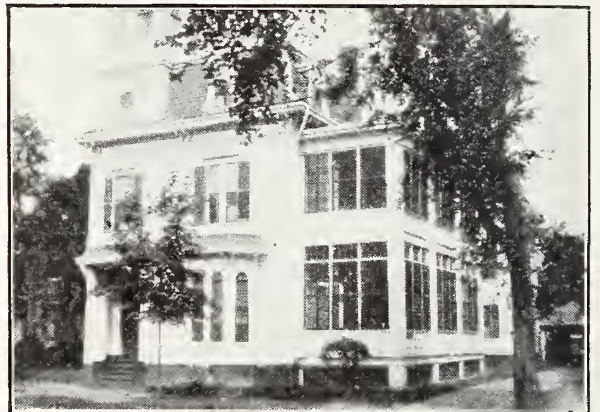
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No. 8

*Special Problems in the Diagnosis and Treatment of Peptic Ulcer**

By EVERETT D. KIEFER, M. D., Department of Gastroenterology, The Lahey Clinic,
Boston, Massachusetts

So much has been written on peptic ulcer that further discussion of the routine management of the condition is unnecessary, but there are special problems of diagnosis and treatment and some changing concepts of the disease that give the subject continued interest.

The diagnosis of peptic ulcer is not difficult as a rule. The symptom complex is so well known and so constant in a high percentage of cases that usually a fairly reliable diagnosis can be made on the history alone. This, however, is a dangerous practice. The diagnosis should rest upon a triad of facts, namely the history, the gastric hyperacidity and the X-ray deformity of the stomach or duodenum.

The importance of an early and accurate diagnosis of a patient with indigestion that suggests ulcer does not appear to be generally appreciated. When one realizes that evidences of cancer of the stomach, which not infrequently occurs in patients of the ulcer age, may in the initial stages mimic ulcer, the importance of early diagnosis is obvious. On the other hand, there are many patients who have typical ulcer symptoms caused by bad dietary habits, excessive smoking or other functional causes and if they are stigmatized

with the diagnosis of ulcer they are placed at an unfair disadvantage when it comes to buying life insurance or to entering professions with strict health standards.

One of the helpful points is the history of night pain. Nearly all patients with a real ulcer, experience at some time recurrent pain, wakening them about 1 or 2 a. m., while the patient with functional indigestion rarely does.

The use of the gastric analysis is too often neglected outside of hospital or clinic practice. Its value is not only confirmatory but is often a warning which prevents a wrong diagnosis. The dictum, "no acid, no ulcer", is one of the most reliable and when free acid is lacking or is low, duodenal ulcer is improbable in spite of positive roentgenologic evidence which may be produced by causes other than ulcer, such as gallbladder disease.

Therefore in order to make a positive and reliable diagnosis of ulcer, we need a good history, an X-ray defect and hyperacidity. Without any one of this triad the diagnosis is not on a sound basis.

Although the characteristic syndrome of pain—food—ease is generally typical, when an ulcer penetrates deeply into the tissues so that there is direct irritation of segmental

* Read before the Oxford County Medical Society, Bethel, Maine, October 30, 1940.

nerves, symptoms may arise which are not in the least suggestive of peptic ulcer. Often severe pain without relation to meals may occur in the back, flank and lower chest, in such a way that the physician's thoughts are directed away from the gastrointestinal tract and he may not even suspect ulcer as a cause. If, however, he remembers that any otherwise unexplained pain in the abdomen, back, flank or lower chest may be the symptom of a penetrating ulcer, or he is alert enough to detect signs of bleeding into the intestinal tract, he may order a roentgenologic examination of the stomach, which clears up the diagnosis.

An understanding of the clinical course or life history of an ulcer is of utmost importance, not only in diagnosis but in the management of the condition. As is well known, the course is characteristically intermittent, with periods of activity and periods of quiescence. Furthermore, it tends to be a progressive disease. With each attack of active ulcer, a little more damage is done; a little more tissue is ulcerated, and more scar tissue results. If this is allowed to continue over a period of years there is an accumulated scarring and deformity of the duodenum which produces the calloused, indurated and often intractable lesion which is so often associated with a long ulcer history. This progressive pathologic change may also cause serious complications, such as gross hemorrhage and obstruction.

It is obvious, therefore, that it is important to get an ulcer under control and keep it under control, thereby arresting this progressive scarring of the duodenum. Therefore, adequate treatment, even for the patient who does not complain much and tolerates recurrent attacks over many years, is the only preventive of the type of ulcer which often presents such a difficult problem in later life.

One of the special problems associated with the chronic, long-standing ulcer is one of diagnosis. Although there may be no difficulty in demonstrating the gross lesion, the usual ulcer symptoms have become so atypical that the clinician cannot be certain that the ulcer is the cause of the patient's complaints. Often it is necessary to study and painstakingly rule out other body systems and finally remove the ulcer surgically before the causative relationships of the duod-

enal lesion with the patient's symptoms can be established.

In the light of our present knowledge, there is no cure of the disease which produces peptic ulcer. Clinical experience suggests that some patients, as they grow older, seem to recover from the tendency to reactivate their ulcer, but just when this occurs or why it occurs is not known.

Treatment, therefore, whether it be medical or surgical, must be considered as a control and not a cure. It is important for patients to understand that their ulcers can be healed and they can be taught how to keep their ulcers healed, but the control of the disease is a lifetime job. They must always follow certain rules of living that protect them from recurrences of active ulcer.

The optimum general plan for the treatment of an uncomplicated case consists first, of hospital treatment for a period of approximately three weeks, in order to bring about a sound healing of the ulcer, to put the patient in the best general health and to teach him the fundamental rules of treatment and control. Second, during the following months which may be considered as a period of consolidation of the treatment in the hospital, the patient is kept on a regime which is gradually modified as control of the disease is evidenced by repeated X-ray and laboratory examinations, until the regime closely approaches a normal way of living with, of course, some restrictions as to diet, habits and activities. The third period which is of indefinite duration, leaves the patient practically "on his own", putting into practice the measures he has been taught and which serve to protect him from recurrences.

There are several problems which may arise during hospital treatment. Hypersecretion of highly acid gastric juice is a concomitant of duodenal ulcer. It is as much a part of the disease as the ulcer itself. It is well known that if the free acid of the gastric contents is kept neutralized or nearly so, healing of the ulcer is promoted. Milk and cream feedings alone frequently do not control the acidity and for this reason alkalies or other antacids are often necessary in order to get as much healing as possible during the patient's stay in the hospital. Although Sippy powders are effective, certain undesirable

properties have resulted in the widespread use of other antacids, particularly the colloidal preparations of aluminum hydroxide. A practical method which gets results and keeps the cost of treatment within reason is to combine the use of Sippy powders and aluminum hydroxide in alternate doses. With this method, alkalosis is seldom encountered and aspirated samples of gastric juice show well neutralized acidity.

High night acidity in duodenal ulcer has caused some clinicians to employ an indwelling soft stomach tube, through which a neutralizing or buffering solution is administered through the night hours by a constant drip apparatus. When nursing care is adequate it has been found much simpler to give the patient an hourly dose of antacid by mouth during the night. This can usually be done without fully awakening the patient and, surprisingly, there is very little complaint of disturbed sleep.

Constipation is frequently a problem since the ulcer diet and medication tends to produce hard stools. Magnesia added to the powders can be used, although sometimes intestinal irritation develops from it. In such cases the daily instillation of oil into the rectum is a practical solution.

During the first six to twelve months after the period of hospital treatment patients should be kept on a strict regime. In general it is better to over-treat than to under-treat. Repeated check-up examinations of the gastric acidity and the roentgenologic appearance of the duodenum keep the patient more faithfully on the regime and govern the modification of the treatment.

By the end of one year nearly all patients need only to eat three meals a day with milk at 10 a. m. and at 3 p. m., and to take an antacid after each meal and at bedtime.

The question of smoking is often a difficult problem. It is generally accepted that tobacco has a deleterious effect upon the control of ulcer, but the exact mechanism of this effect is not well established. An idiosyncrasy to tobacco among ulcer patients has to be considered and if true, would mean that a few cigarettes are as bad as a large number. In practice the total elimination of tobacco is one of the most important steps in the control of ulcer. Patients usually find that the sud-

den complete elimination is the easiest method. For the inveterate smoker a substantial reduction without complete elimination is usually impossible.

Alcohol in any form or in any amount is contraindicated, but it seldom presents as difficult a problem as does tobacco.

Gross hemorrhage is a complication of peptic ulcer which may present serious problems of therapy. Mild hemorrhage which is unaccompanied by fainting or shock is not a difficult problem and usually can be treated by the routine ulcer regime. Severe hemorrhage consists of a sudden reduction in blood volume, with fainting, shock, pallor, fall in blood pressure and rise in pulse rate. These clinical signs are indications that a fairly large vessel has been opened by the ulcer. The loss of blood is stopped by retraction of the ends of the vessel and thrombus formation within them. If there are any factors present which prevent retraction of the eroded ends of the vessel the hemorrhage may be repeated when the blood pressure recovers from the initial drop. The chronic, indurated and caloused ulcer may prevent good retraction of the blood vessel, as may arteriosclerotic changes in the vessel wall. This is the explanation now held for the five times greater mortality for hemorrhage in patients over the age of forty-five as compared with hemorrhaging cases in general. For this reason and because death rarely occurs with the first hemorrhage, recurrent or secondary bleeding within several hours is of important significance. When it occurs, surgical interference in spite of its hazards, may be necessary to save the patient's life. Therefore, one of the questions to be determined as soon as possible is whether or not the hemorrhage will be intractable to medical measures. For the first twenty-four hours after a profuse hemorrhage, complete starvation of the patient is indicated. The ingestion of food during this stage may induce further vomiting and there is little to be gained therapeutically from food or alkali, since the stomach contains considerable blood and free acid is usually absent. If the bleeding lesion is a hard, caloused ulcer with an eroded branch of the pancreaticoduodenal artery, no dietary regime can be expected to stop the loss of blood. It is not necessary to prolong the starvation

period for more than two days. The reported improvement in mortality rates with the use of the Meulengracht method of early feeding of hemorrhage cases is probably due to the avoidance of dangerous exhaustion from too prolonged starvation.

The management of hemorrhage, therefore, consists of complete bed rest, starvation, repeated doses of morphine or some other form of adequate sedation, and careful observation for signs of repeated hemorrhage which is best detected by keeping an hourly or half hourly record of the pulse rate and blood pressure.

Blood transfusions if given slowly can be used without fear of raising the blood pressure to the point of causing further hemorrhage. If the patient has had a hemorrhage so severe that a secondary hemorrhage might cause a fatal collapse, a transfusion should be given. When secondary bleeding occurs it is better to have the blood in the patient than in the donor, even if the donor is "on call." Parenteral fluids should be used with caution to prevent excessive dehydration.

The blood counts and hemoglobin determinations are of little value in estimating the severity of blood loss. One must depend upon the degree of pallor, the severity of the shock, and the quantity of blood expelled by mouth or by rectum.

Surgical interference is necessary in cases of acute hemorrhage which show repeated shocking hemorrhages while the patient is on a medical regime. However, the operative risk is extremely high and the operation should be attempted only by a surgeon who has had considerable experience in gastric surgery.

Pyloric obstruction is another complication of duodenal ulcer which presents special problems of treatment. Gastric retention may result from the acute spasm and edema of active ulcer or from the chronic and progressive narrowing of the duodenum from cicatrix formation resulting from a chronic ulcer. In all cases of gastric retention there is a combination of these two factors and for this reason all cases can be relieved, at least temporarily, by medical treatment, consisting of adequate acid control and antispasmodics. However, there is a wide variation in the relative importance of these two factors. If

acute spasm and edema are the predominant causes, the relief from medical treatment will be permanent as long as the activity of the ulcer is controlled. If, on the other hand, chronic organic stricture is the chief cause of the obstruction, medical relief is only temporary and the motor function of the stomach becomes decompensated with the first slight upset.

If the obstruction is accompanied by evidence of active ulcer, hypersecretion, a short history of ulcer and a short history of obstructive vomiting and the gastric stasis is quickly relieved by adequate ulcer therapy, surgical interference may be considered unnecessary. If the obstruction is present without accompanying ulcer activity or hypersecretion, the history of ulcer extends over several years and the patient has had obstructive vomiting for more than two months, surgery is probably necessary for satisfactory relief, particularly if the emptying time of the stomach is delayed after a period of medical treatment.

In the medical treatment of the obstructing ulcer the diet of fluids or soft solids should be limited in amount so as not to exceed the capacity of the stomach to empty itself. If less cream is used and either boiled milk or evaporated milk is administered, the emptying of the stomach is facilitated. The free acid should be controlled by the use of alternate doses of Sippy powders and aluminum hydroxide throughout the twenty-four hours. Dilatation of the stomach is prevented either by aspiration with a stomach tube every eight to twelve hours or by an indwelling stomach tube, with siphoning out of stomach contents, part of the time. Atropine in 1/100 grain doses, given hypodermically every four hours, is helpful. Frequently loss of fluids and chlorides makes it necessary to give parenteral injections of saline solution until the vomiting is controlled, and fluids begin to pass the pylorus.

The problems presented by the gastric ulcer are much the same as those of the duodenal lesion, with the additional and imperative feature of early and accurate differentiation from possible malignant ulcer of the stomach.

Roentgenologic studies of the location, size and morphology of the crater may give highly

probable evidence indicating that the lesion is either benign or malignant, but experience has demonstrated exceptions to all the criteria so that a diagnosis from a single roentgen examination cannot be depended upon entirely, particularly when the penalty for error is so severe. Even surgical exploration is not conclusive in some cases. The same is true for gastroscopic examinations.

The only practical and reliable method is the complete healing of the lesion on a medical regime, observed by repeated roentgenologic studies at regular and frequent intervals. The lesion must heal completely and disappear, otherwise malignancy cannot be considered as eliminated. Since many gastric ulcers do heal readily, this method has saved many unnecessary operations. A malignant ulcer or an intractable benign ulcer may improve on a medical regime but it does not disappear and consequently a wide resection is necessary.

Surgery in the treatment of peptic ulcer should not be considered as a cure of the disease but an additional procedure designed to help in the control of the condition and mechanical difficulties which result from peptic ulceration.

Acute perforation is an obvious indication for immediate operation to close the leak and to drain the abdominal cavity.

Intractable pain is occasionally an indication and usually results from a long-standing, uncontrolled ulcer which has resulted in marked organic changes in and around the duodenum. Subtotal resection of the stomach with removal of the first portion of the duodenum is the operation of choice.

The occurrence of repeated gross hemorrhages is an indication for operation, particularly if an adequate medical regime has failed to prevent them and if the hemorrhages have been severe. Obviously, an operation which removes the lesion, usually a subtotal resection, is desirable.

Acute, intractable, severe hemorrhage is an indication for operative interference if adequate medical measures have failed and the operation is done before the patient becomes moribund. Removal of the bleeding lesion or opening of the stomach or duodenum with transfixion of the bleeding vessels is neces-

sary. A subtotal resection may be advisable at a second operation.

Pyloric obstruction, when due to chronic organic stenosis of the duodenum or pylorus, is a mechanical difficulty which requires surgical relief. This is about the only condition in which gastroenterostomy is indicated, particularly if the patient is elderly and the activity of the ulcer has subsided.

The possibility of cancer cannot be ruled out in some cases of gastric ulcer and ulcer of the duodenum near the pylorus. If repeated observations do not make the differentiation clear, there is no choice but to treat the lesion as a malignant one and remove it.

The postoperative mortality has long been a bugbear of gastric surgery particularly associated with the more radical procedures which are now considered to be desirable from a therapeutic standpoint. Major improvement has come about through changes in technic, developments of new methods of anesthesia and better preoperative and postoperative care of the patient, with special reference to the combating of respiratory complications with bronchoscopy and clearing the air passages by suction. The surgical staff at our clinic now reports 140 consecutive subtotal gastric resections, with but one death, which was due to embolism.

Gastrojejunal ulcer is a complication which may follow any operation for duodenal ulcer in which the gastric mucosa is anastomosed to jejunal mucosa. It is always on the jejunal side of the anastomosis, so it is actually a jejunal ulcer. It appears to be less frequent after subtotal gastrectomy than after gastroenterostomy. It practically never occurs after an operation for gastric ulcer since it is associated with persistent acid secretion. If a patient who has had an operation for duodenal ulcer begins to complain of recurrent typical ulcer symptoms or hemorrhage, or atypical pain, jejunal ulcer should be suspected.

There appear to be two clinical types. The first type is characterized by mild distress, frequently by gross hemorrhage and may occur at any time after operation. The roentgenologic examination shows no definite crater and the symptoms are relieved readily by rest and medical treatment. Apparently the best explanation of this condition is on

accidental traumatic break in the jejunal mucosa, with peptic erosion of the injury which is superficial and tends to heal.

The second type is characterized by severe and often atypical pain, hemorrhage and occurrence within a few months of operation. The roentgenogram frequently shows a penetrating crater in the jejunum which responds poorly to medical treatment.

Prolonged and rigid ulcer management

does heal these ulcers in some cases, especially if emphasis is placed on inactivity for a long period of time.

The tendency to perforation and to hemorrhage, however, makes temporizing undesirable and reoperation is frequently advisable.

To summarize briefly, the best answer to the ulcer problem is early diagnosis, early treatment and prolonged and adequate control of the disease.

A fertile field for the tuberculosis germ is found in workers over thirty years of age. Although the disease is recognized as an occupational hazard of the "dust trade" employees, the occurrence of the disease in other trades is wide enough to warrant the X-ray examination of all workers in all fields of industry.—KENDALL EMERSON, M. D.

The ex-patient must always be considered a possible source of infection in tuberculosis, and he must never be told he is safe.—J. G. BOHORFOUSH and PAULINE MICHAEL, *Amer. Rev. of Tuber.*, Oct., 1940.

Crowded living conditions, mounting prices of necessities, increased mental, emotional and physical strain — inevitable by-products of industrial defense activities — are factors dangerously favorable to the increase and spread of tuberculosis.—KENDALL EMERSON, M. D.

Tuberculosis of the eye is just as much tuberculosis as tubercle of the lung, and just as little amenable to drops and lotions as pulmonary tubercle is to sprays and bronchial injections. — H. M. TRAQUIR, *Ann'l Rep. Tuber. Soc. of Scotland*, 1940.

Probably no tuberculous spine ever heals completely, and a focus always persists which may become active under unfavorable circumstances. Spinal fusion tends to lessen the probability that such conditions will arise, and it also tends to hasten the healing process.—J. A. KEY, M. D., *Jour. Bone and Joint Surg.*, July, 1940.

Without coöperation of the people, a doctor can no more prevent tuberculosis than

he can prevent accidental drowning.—U. S. Pub. Health Serv. Rep., Dec., 1940.

Only the most rigid contagious disease technic provides a barrier and prevents the spread of tubercle bacilli from hospital patient to student nurse.—J. A. MYERS, M. D., et al., *Annals Intern. Med.*, Nov., 1940.

So This is Progress! Progress is determined not by where you are but where you are headed. We were reading this morning an article on vitamins. One of the case histories was about a poor fellow who had a motley assortment of ailments, one of them being tuberculosis. He was given liberal doses of vitamins, and he improved so much that at last the doctor was able to discharge him—to a tuberculosis sanatorium!

The problem of tuberculosis is concentrated in the immediate environment of the "positive sputum" case. — *Rep. Milbank Memorial Fund*, 1928-1940.

Nurses and interns risk tuberculous infections in a general hospital which does not accept known cases of pulmonary tuberculosis. This is indicated by the change in their reactions to the Mantoux test. As this change is not shared to a comparable degree by the students of the same age group in the same community, there is reason to suspect that patients with whom they are in contact may be spreaders of the disease. Obviously, patients with open tuberculosis who gain admittance to a general hospital bring their infection with them and add to the hazards of their new environment.—M. E. BARNES, M. D., *Jour. of Amer. Med. Assn.*, Nov. 23, 1940.

*Perforation of the Esophagus by Foreign Bodies; Report of Two Cases With Recoveries**

By GEORGE O. CUMMINGS, M. D., Portland, Maine

Esophageal perforation foreshadows mediastinitis. The esophagus may be perforated by ulcerating new growths, instrumentation or foreign bodies. Esophageal perforation is uncommon or uncommonly reported. Head¹ found but 72 instances noted as due to foreign bodies in an extensive survey of the literature. Hunt² found but 20 cases of mediastinitis following rupture of the esophagus recorded at the Manhattan Eye and Ear Infirmary, St. Lukes and the Fifth Avenue Hospitals in a 10-year period ending in 1936.

Immediate mediastinotomy is advocated by some authors when an esophageal perforation is recognized. It does not seem that this should always be necessary; therefore let us examine certain factors.

According to Clerf³, "The frequency of injury to the esophageal wall by jagged or pointed bones, open safety pins, dentures, and other irregular objects and the continuous presence of mouth secretions should result in frequent peri-esophageal infection, mediastinitis and death. The reverse seems to be the case. This may be explained by the flexibility and elasticity of the esophageal walls, the protective barriers afforded by the peri-esophageal tissues in slowly perforating objects, and by the drainage into the esophagus from the area of suppuration through the opening made by the foreign body."

By far the greatest number of foreign bodies find lodgement in the cervical esophagus which fortunately has the better blood supply, lymphatic drainage, fascial protection and whose surrounding tissues are more available for study, palpation and operation than those of the thoracic portion.

Peri-esophagitis can be demonstrated by X-ray study of the neck region in many non-perforating foreign bodies that find lodgement in the cervical esophagus, as is evidenced by the increased width between the trachea and cervical spine. By inference we may assume a similar condition caused by the

lodgement of foreign bodies in the lower esophagus. We know from experience that most of these conditions resolve.

Injury or perforation of the esophageal wall results in peri-esophagitis which may subside or go on to abscess formation or cellulitis.

The following data should be taken into consideration in judging the increasing invasion of infection from a mild peri-esophagitis to a hopeless mediastinitis for, depending on the virulence of the infection the entire course may be prolonged or become but a matter of a few days and we must have some yard stick to tell us whether we are to sit tight or to do a mediastinotomy. Of prime importance are the general appearance and well-being of the patient, increasing pulse, temperature and respiration, rising white count with shift to the right. Secondly, increasingly painful and difficult swallowing and, in perforation of the cervical esophagus, tenderness in the neck followed by swelling and subcutaneous emphysema; daily X-ray studies showing greater evidence of peri-esophageal swelling with perhaps shadows revealing air in the surrounding tissues or abscess cavity. Finally the development of a mediastinitis either from a descending infection or from direct extension from a perforation in the thoracic esophagus.

Since mediastinitis may follow a minor injury to the esophagus, and the hemolytic streptococcus is most to be feared, sulphanilamide should be administered in adequate doses to any patient who has had a known esophageal injury or perforation.

If the foreign body has been found projecting from a rent in the esophageal wall which is discharging pus or a gush of pus follows its removal, the drainage of the abscess may be adequate, particularly if the wound is spread with forceps, but the patient should be most carefully watched and if there is an increase of pulse, temperature and respiration

* Read before the New England Otolaryngological Society Nov. 12, 1940.

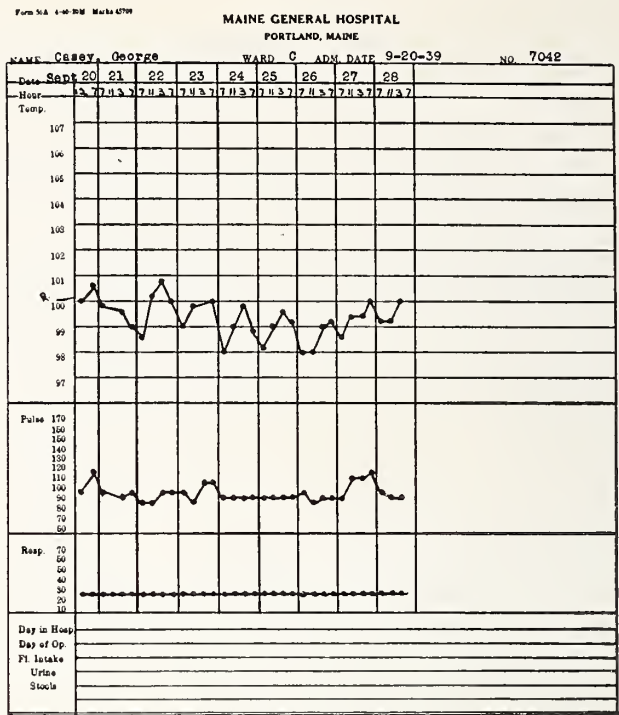
and a rising white count with shift to the right, a mediastinotomy should be performed despite the lack of other signs and symptoms of invading infection and X-ray findings, for the time to cure mediastinitis is before it occurs.



A. H., age 19, #12761, 11-27-34. Thumb Tack in Esophagus—almost identical with Dr. Hunt’s case that developed a fatal mediastinitis.

Hunt reported a fatal mediastinitis 5 days after the lodgement of a thumb tack in the cervical esophagus and 3 days after a mediastinotomy. In 1936, a patient entered the Maine General Hospital with a similarly located thumb tack which was removed and the patient made an uneventful recovery. The thumb tack wound in Dr. Hunt’s case was the portal of entry for a virulent infection—comparable, let us say, to a lymphangitis following a needle prick—understandable but unusual. Now I am not going to do an immediate mediastinotomy on the next patient whom I see with a thumb tack in his esophagus, at least not until I have observed his general well-being, pulse, temperature, respiration and white count, but I am going to watch him most carefully and give him adequate doses of sulphanilamide.

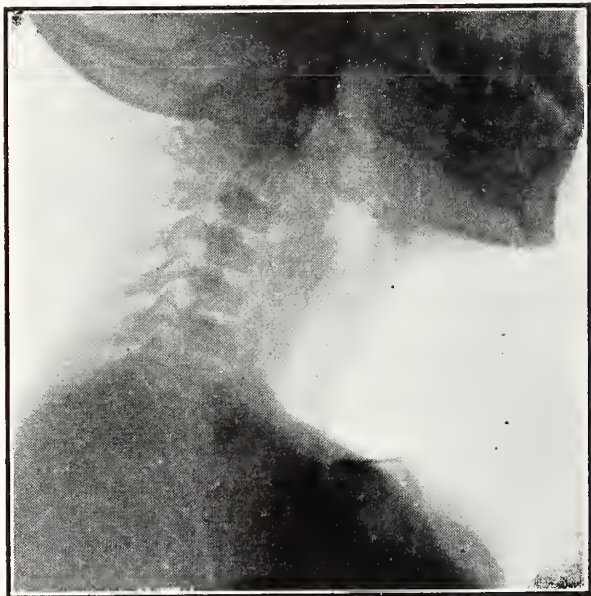
George Casey, age 9, entered the Maine General Hospital, September 20, and was discharged September 28, 1939. Three days before entry to the hospital, while eating roast chicken, he swallowed a bone and felt it lodge in the post-laryngeal region. Immediately after he had a severe spasm of coughing and strangling. He was taken to a physician who stated that no foreign body was present, however, since the accident the patient had been



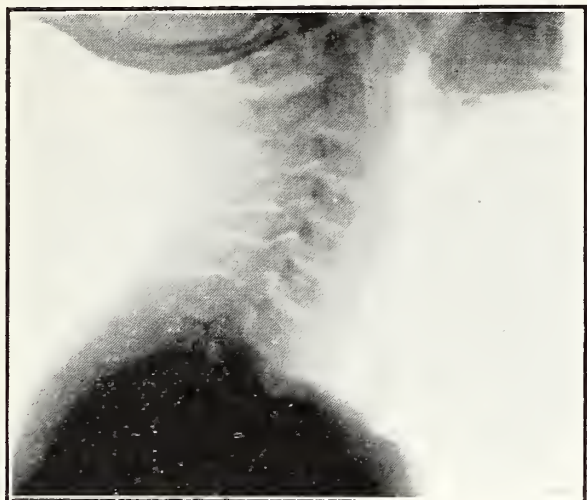
George Casey, age 9, #7042, 9-20-39. Temperature Chart.

unable to swallow solid food. Two days before entry his breath began to be foul and he began to develop a torticollis, carrying his head to the left.

On admission it was observed that there was moderate swelling of the neck about the larynx, that there was inflammatory reaction and edema of the arytenoids, the piriform sinuses were filled with muco-pus and that his breath was foul. His white count was 16,500 with 76% neutrophils. An X-ray study of



George Casey, age 9, #7042, 9-20-39 Lateral X-ray of neck showing chicken bone lodged in post-laryngeal region capped by gas bubble. Note increased post-laryngeal width (3.2 cm) due to edema.



George Casey, age 9, #7042, 9-27-39. Lateral X-ray of neck 7 days after the chicken bone was removed, showing decrease in post-laryngeal edema to 1.1 cm.

the cervical region revealed a shadow 1.4 cm by 3 mm, the density of a thin bone topped by a gas bubble in the region of left piriform sinus. There was also a marked increase in width 3.2 cm of the post-laryngeal tissues.

At operation, with no anesthesia, a child sized direct laryngoscope was introduced behind the larynx and the tip of a sharp-pointed chicken bone (2cm by 2mm) was observed barely sticking out from a punctured wound posteriorly in the depths of the left piriform sinus. After the bone was removed foul pus welled up from the perforation which was then spread open with an alligator forcep.

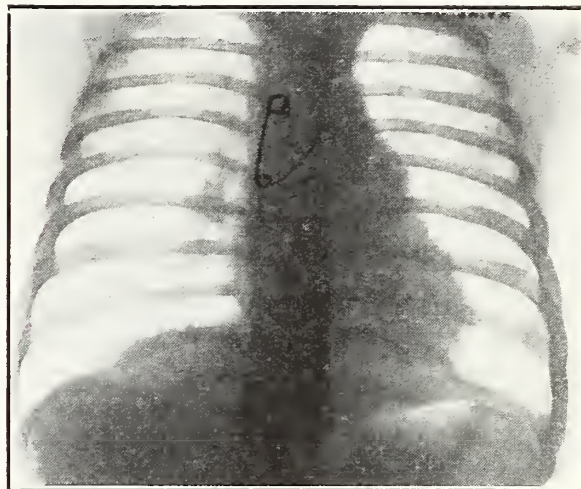
It was considered that we were dealing with a localized abscess with protective tissue reaction and good drainage. It seemed better surgery to watch the patient's progress carefully, particularly noting changes in temperature and in leucocytosis, than, with the intent of warding off a possible mediastinitis, to open the neck externally with the danger of furthering the extension of infection in the tissues of the neck.

For the first 24 hours, 15 grains of sulfanilamide with bicarbonate of soda were given every 4 hours. This was gradually decreased and finally stopped on the seventh hospital day. The initial leucocytosis also consistently dropped and returned to normal. Six days after admission the dysphagia and torticollis disappeared.

In course of his hospital stay five X-ray studies of the chest and cervical region were made. The chest was consistently negative while the post-laryngeal edema gradually sub-

sided, until the day before his discharge it measured 1.1 cm.

In addition to mediastinitis, pointed objects in the thoracic esophagus may perforate the great vessels or neighboring viscera.



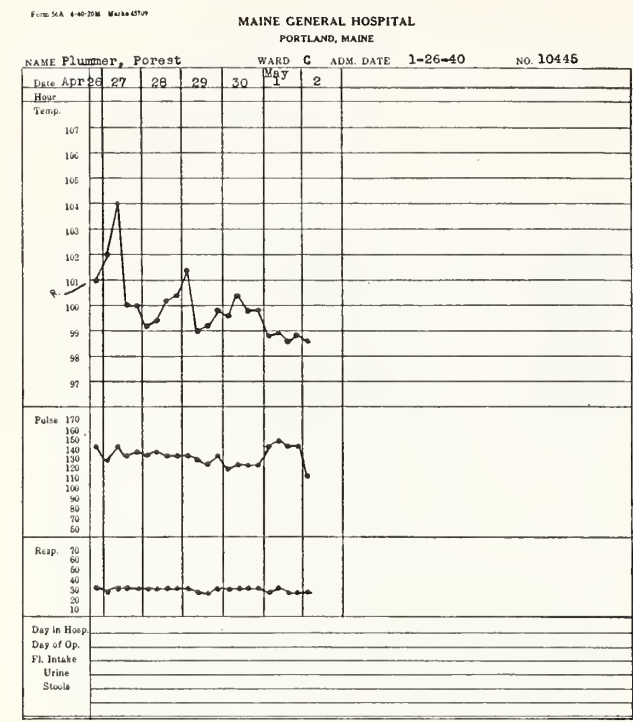
Forrest Plummer, age 10 mos., #10445, 4-26-40. Antero-posterior X-ray of chest showing open safety pin point up in mid-esophagus.

Forrest Plummer, age 10 months, entered the Maine General Hospital, April 26th and was discharged May 2, 1940.

Five days before entry to the hospital his mother thought that he swallowed a small open safety pin. Thereafter the baby was uncomfortable and seemed to have pain and discomfort on swallowing. He refused solid foods and vomited liquids, in fact 3 days before admission the vomitus was said to be "coffee grounds" in appearance and he began to pass tarry stools. He developed a cough and his mother felt that he had a temperature although it was not taken.

X-ray examination showed an open safety pin in mid-esophagus with point up and to the left.

Under a general anesthesia a 6 mm esophagoscope was introduced and the keeper of the pin brought to view. This was imbedded in some brown material that was at first thought to be cloth. The scope was insinuated by the keeper and the point of the pin was disengaged from the esophageal wall. Smart bleeding followed which was controlled with the instillation of a medicine dropper of adrenalin into the esophagoscope. The point was then grasped and the pin withdrawn by the point sheath method. The spring end was attached to a mass of pale fibrin 3 inches in length that formed a cast of the esophagus.



Forrest Plummer, age 10 mos., #10445, 4-26-40. Temperature Chart.

On admission the child's temperature was 101, pulse 140 and respiration 32. Following the esophagoscopy the next morning, his tem-

perature rose to 104 but dropped in course of the day to 100.

That the point of the safety pin had perforated the esophagus was obvious at admission from the history of coffee ground vomitus and tarry stools. It was felt that if the baby had already survived 5 days and was in good condition an immediate mediastinotomy was not necessary. Sulphanilamide was administered and the child made an uneventful recovery.

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The pregnant woman has need, in most instances, of modifying her diet when she arrives in this physiologic state, report J. H. Musser, M. D., and W. A. Sodeman, M. D., of New Orleans, Louisiana, in *The Journal of the Michigan State Medical Society* for April, 1941. Likewise, it is equally necessary that the diet be watched carefully during the period of lactation. The caloric intake must be increased, adequate protein and minerals must be taken by mouth, and particular attention should be paid to vitamins. The increased demands of the fetus plus the increase in basal metabolic rate indicates need of a greater number of calories than for the normal individual. When nursing, the production of the milk which is fed to the baby is responsible for the loss of 700 calories for each 1,000 cc. of milk. Mineral requirements are increased during pregnancy. Calcium, phosphorus, iron, iodine and other minerals must be supplied the fetus. Many diets are adequate under normal circumstances. During the period of the puerperi-

um, the diet is not sufficient, and it should be supplemented by a plentiful intake of foods containing these particular minerals. The same generalization applies to vitamins. The diet ordinarily adequate to maintain good health in the non-pregnant person will not be sufficient for the pregnant woman. Therefore, the diet should be supplemented by foods rich in vitamins or by vitamin concentrates.

Tuberculosis, like all plagues, spreads most dangerously in the close contacts of the family. Resistance breaks down before a mass attack, and the steady bombardment of each other by husbands and wives, parents and children, brothers and sisters is the best of all mechanisms for perpetuating the disease. People exposed to tuberculosis in their own homes are, roughly, ten times as likely to fall sick of it as are people in the population at large.—*Plague on Us*, by GEDDES SMITH, Commonwealth Fund, 1941.

Cervical Ribs

By HENRY G. HADLEY, M. D., Washington, D. C.

Cervical ribs are an anomaly of regional differentiation similar to the more frequent abnormalities of sacralization and lumbarization at the lumbosacral junction.¹ The cervical rib or a dorsalization of the 7th cervical is found in 1% by autopsy.² Many cases described as cervical are really rudimentary first thoracic ribs, and this can not always be decided except by an examination of the entire spinal column.³ A short first thoracic rib may be mistaken for a cervical rib. In 1000 X-ray examinations, Bonanno⁴ found 165 which were not complete. A similar differential anomaly is a lumbar rib which he found in 43 of the same series, of which 26 were unilateral and 17 bilateral. Gladstone and Wakeley found that cervical ribs are associated with other anomalies and in 45% these anomalies were present.⁵ Cervical ribs may cause certain abnormalities as scoliosis which is present, especially frequent in the unilateral variety. Scoliosis is especially apt to follow if the rib is unilateral, long, and fixed solidly to the first dorsal, and the congenital form of scoliosis is a sign of cervical rib in one case out of three.

There seems to be an hereditary tendency, as Sterck-Hanssen found 8 instances in three generations of the same family.⁶ Israel reported their presence in two sisters,⁷ and Unger in a mother and her son.⁸

Anatomically, the rib may be short, terminating in an enlarged extremity in the form of a spatula, or long and terminating in the attachment of the first thoracic rib by a fibrous or bony union or by an articulation. The posterior portion of the rib may unite with an articular tubercle of the 7th cervical in a movable fashion or may be joined to the lateral surface of the body of the 7th cervical. The clinical signs are from associated lesions such as scoliosis, facial asymmetry, Klippel-Feil syndrome, or Sprengel's deformity.

The cervical rib is bilateral in two-thirds of the cases, and if unilateral, it is more frequently found on the right. They are more

apt to cause symptoms in the female because of the lifted thorax and drooping shoulder.⁹

The symptoms often do not appear until later life because of the descent of the shoulder from weakening and hypotonicity of the muscles which suspend the shoulderblade, particularly the trapezius. Another reason is the later development of ossification.

Nerve lesions are very frequent and are often that which calls attention to the cervical rib, while the phrenic nerve is rarely involved. The cords of the brachial plexus are frequently bent, compressed or stretched during movements of the head and corresponding arm. The nerve most often involved is the primary inferior portion which is more often in contact with the abnormal rib. A rib is more harmful if upright than if curved like a first dorsal, as it pushes back the arteries and nerves.

These nerve lesions are burning, tingling sensations with cramps and pains radiating to the distribution of the nerve and occasionally superficial or deep anesthetic symptoms. There are often motor disturbances interfering with grasping movements and occasionally limited palsies, but rarely any paralysis. These nerve disturbances vary in degree from minor symptoms to the fully developed picture of the Klumpke-Dejerine syndrome, which is an atrophic paralysis of the muscles of the arm and hand.¹⁰

A complete rib is rare which is then united to the manubrium sternum. More often they are incomplete with the anterior extremity, free or resting on the first thoracic rib.

Vascular lesions are very interesting, due to the subclavian artery being either bent over the abnormal rib or pushed in front. This vessel may pass through a narrowed space of retracted scalenus between the scalenus anterior and the cervical rib or imprisoned in the fibrous aponeurosis lying between the 7th cervical and 1st dorsal. In this situation, it may be strongly compressed and become the seat of an aneurysmal dela-

tation or become obliterated or thrombosed.

Sympathetic lesions are more rare and may simulate Reynaud's disease with crises of vasoconstriction or chronic edema with cyanosis or pallor. There may be changes of the finger nails, with atrophy of the thenar eminence or interosseus spaces.

Case No. I

Mrs. M. D., white, aged 36, first seen March 23, 1937, complained of pain in both arms. She had a marked difference in the height of the shoulders, the left being higher and closer to the neck. There was considerable loss of motion of both the neck and the left shoulder. X-ray showed spina bifida occulta of the lower five cervical vertebræ and the upper six thoracic. Cervical rib and a wedge-shaped second thoracic hemivertebra with associated scoliosis were present.

Case No. II

Mr. I. R., aged 48, was operated upon at the age of twenty under a mistaken diagnosis of congenital torticollis. The deformity persisted, however, without change. There was a marked cervicodorsal lateral curvature to the right and limitation of the head movements in all directions. X-ray examination showed a fusion of the second and third cervical vertebræ and an incomplete development of the left half of the sixth, forming a wedge-shaped vertebra. There was an up-right cervical rib present.

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Seventy-five per cent of the 20,000 annual deaths from appendicitis could be avoided if patients were seen early by their physician and the proper treatment instituted. According to R. G. Robinson, M. D., Detroit, in a paper published in *The Journal* of the Michigan State Medical Society for April, 1941, our school systems should include in their curricula courses which would provide sufficient general medical information to protect the citizens of tomorrow against tragedies such as ruptured appendix.

Appendicitis requires surgical treatment.

A surgeon should determine whenever the diagnosis is uncertain:

(1) Is watchful expectancy reasonably safe?

(2) Do the findings justify operation?

These two points may be determined only by repeated physical examinations and laboratory studies and by intelligent consultation.

He feels that these approaches to the problem of appendicitis should materially reduce the death rate from this condition.

*Maine Medical Association Councilors Elected at York Harbor,
June 23, 1941, at the Eighty-ninth Annual Session*



JOHN O. PIPER, M. D.
Waterville, Maine
elected
Councilor, Fourth District
1941-1944



WILLIAM A. ELLINGWOOD, M. D.
Rockland, Maine
re-elected
Councilor, Third District
1941-1944

From the Secretary's Office

To the Members of the Maine Medical Association:

The Council of the Maine Medical Association in session July 24, 1941, at Squaw Mountain Inn, Greenville, Maine, voted as follows:

That the 1941 Fall Clinical Session be held at Portland, Maine. Tentative dates October 16 and 17.

That the Ninetieth Annual Session be held at the Poland Spring House, Poland Spring, Maine, June 21, 22 and 23, 1942.

More detailed information regarding the Fall Clinical Session will be published in the September issue of the JOURNAL, and the program in the October issue.

As much of our correspondence continues to be sent to our former address at 22 Arsenal Street, we again call to your attention our new address: The Congress Building, 142 High Street, Portland, Maine.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

Editorial

The Annual Meeting

The total registration of members at the session at York Harbor was 245. The criticism, if it can be called that, by many who were present was that the place of the meeting should be one that affords an opportunity for the greatest number to attend without sacrifice of too much time. It is a long distance from the northern and eastern parts of our state to York Harbor, delightful as it is and with a hotel service equalled by few and surpassed by none, but since our annual session occupies two and a half days there must be added to that the time required to come and return. The House of Delegates is the body that transacts no small part of our business. Meeting as it does on the afternoon of the first day it becomes the part of good judgment and management to have the most central location possible, other things being equal, so that our various county societies be represented as they certainly should.

From many standpoints the meeting was most successful. Those who did not attend missed a great deal. The conferences were conducted with credit to the various chairmen, the problems presented were practical and well thought out and, best of all, very well discussed. The fact that certain groups meet in conflict of time with others seems impossible to completely avoid. It was felt when the conferences were first made a part of the program that they gave a better opportunity for closer and more intimately interested men to discuss clinical problems somewhat impossible in a general session. Undoubtedly this is still a fact and we have members whose work is definitely along limited lines who prefer to continue but an attempt will be made to have in 1942 something on the plan of a group conference, more on the order of a general meeting, that will take up important and correlated subjects.

Those present on Sunday evening heard a speaker decidedly worth while. Colonel Frank Lowe not only gave us something to

think about but why. His comments were to the point; backed up by keen judgment and recent personal observations. After the conclusion of his remarks he conducted an open forum for the benefit of those interested and it can certainly be said that those fortunate enough to hear him had a better picture of the importance of the titanic struggle now taking place, what it means to every person in the United States and what we should do to prevent the fate of those nations that underestimated Germany and overestimated their own ability.

It was a pleasure to have as speakers at the annual dinner Governor Sewall and the president of the American Medical Association, Dr. Frank H. Lahey. No one appreciates the value of confidence better than members of the medical profession. Take away confidence from a patient and a serious burden is imposed towards recovery; it may spell defeat. It is right and natural that we should be able to look to our elected officials, no matter whether they represent us in state, national government or our own profession, to do those things and advise those things that will prevent this country from suffering the hideous fate of those less fortunate nations whose leaders were tried and found wanting. Governor Sewall and Dr. Lahey merit the positions of trust and importance they hold and we know and feel confident that the leadership placed in their hands will enable us all to have the feeling that the affairs of the State of Maine and the profession of medicine are with safe and competent men. Those we have elected to official and committee positions in our state association are not strangers to our problems and the ways to meet them. They have served long and well in previous county and state assignments, so again confidence is ours that the duties they have accepted will be carried out with credit and profit to their state and their profession.

County News and Notes

Piscataquis

The special mid-summer meeting of the Piscataquis County Medical Association was held at Squaw Mountain Inn, Thursday, July 24, 1941. An invitation had been extended to the Aroostook, Franklin, Hancock, Kennebec, Penobscot, Somerset, Waldo and Washington County Medical Societies, to the Council of the Maine Medical Association, and to the Ladies. Eighty-one members and guests enjoyed dinner at twelve noon.

During dinner P. L. B. Ebbett, M. D., President of the Maine Medical Association, was called on. He urged a larger attendance at State and County meetings. He requested criticism which would help increase attendance at the State meeting, but requested that the criticism be signed.

Carl H. Stevens, M. D., President-elect of the Maine Medical Association, spoke in a similar vein urging greater attendance at medical meetings.

President Pritham then called on Morgan J.

Rhees, M. D., Director of the Pratt Diagnostic Hospital in Boston, who explained the purpose and aims of the Bingham Fund which has done so much for post-graduate education of the medical profession in Maine.

The meeting was then adjourned to the library where G. E. Haggart, M. D., of the Lahey Clinic, spoke on Low Back Pain. This lecture was most profusely illustrated by lantern slides. You may read this paper later in THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION, but the JOURNAL cannot show pictures of all the slides Doctor Haggart showed, nor can it show them as well as they were shown to those of us who were present at Squaw Mountain Inn.

Bridge and a sail on Moosehead Lake were enjoyed by the ladies.

N. H. NICKERSON, M. D.,
Secretary.

Notices

Annual Meeting of the Maine Medico-Legal Society

The annual meeting of the Maine Medico-Legal Society was held at York Harbor, Maine, June 24, 1941.

President Franz U. Burkett of Portland presided and made remarks on the new law and on law enforcement in general.

William Holt, M. D., of Portland, presented a very interesting case for discussion.

William J. Brickley, M. D., Medical Examiner for the Northern Division of Suffolk County, Massachusetts, addressed the meeting on the work of the Medical Examiner in Massachusetts, and also made comments applicable to our Maine system.

All members who lost their commissions as a result of the new law, and also Doctor Timothy Leary and Doctor Brickley, were elected Honorary Members. It was voted to have a meeting of the Executive Committee, and as many members as possible, at the Fall Clinical Session of the Maine Medical Association.

Medical Examiners who were not at the June meeting may send their annual dues of \$1.00 to Walter S. Stinchfield, M. D., Skowhegan, Maine.

The following officers were elected for the coming year:

President—William Holt, M. D., Portland.

Vice-President—Albert Knudsen, County Attorney, Cumberland County, Portland.

Treasurer—W. S. Stinchfield, M. D., Skowhegan.

Secretary—George L. Pratt, M. D., Farmington.

GEORGE L. PRATT, M. D.,
Secretary.

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
- St. Mary's General Hospital*
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
- Thayer Hospital*
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

Book Reviews

"Cardiac Classics"

A Collection of Classic Works on the Heart and Circulation with Comprehensive Biographic Accounts of the Authors

Fifty-two Contributions by Fifty-one Authors.

By: Fredrick A. Willius, M. D., M. S., in Med., Chief, Section of Cardiology, The Mayo Clinic; Professor of Medicine, The Mayo Foundation for Medical Education and Research, The Graduate School, The University of Minnesota; and Thomas E. Keyes, A. B., M. A., Reference Librarian, The Mayo Clinic; Formerly Carnegie Fellow, The Graduate Library School, The University of Chicago.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$10.00.

The classical writings, from antiquity to modern times, of physicians who seriously and persistently investigated the construction and functioning of the human heart, form the body of this book. Much time and effort has been spent in order to select the most authoritative, the most typically illuminative passages from the large amount of available literature. It is hoped that this aim has been reached. Consequently hereafter every student of the anatomy, physiology, pathology of the human heart and the circulatory system may avail himself of much of the knowledge as it was put into writing by medicine's most important original and authoritative investigators of the circulation of the blood and the mechanisms which make such circulation possible as well as the pathologies which interfere with normal circulation.

Naturally not every fact known about the human heart is contained between the covers of this book, nor is much of what has been written by authors still living included. Nevertheless, this book is what it is meant to be; namely, a literary monument to the men and the spirit of those men who by sincere and industrious application and labor brought about great advances in the art and science of medicine. To the living it represents recorded evidence of the dynamic spirit which delves into the unknown, investigates causes and effects, conquers ignorance, superstition and prejudice. Through self-sacrifice, by indomitably courageous effort in the face of failure and discouragement, truth is established and facts are recorded as guides to a more successful living for future generations.

"The Therapy of the Neuroses and Psychoses"

A Socio-Psycho-Biologic Analysis and Resynthesis

By: Samuel Henry Kraines, M. D., Associate in Psychiatry, University of Illinois, College of Medicine; Assistant State Alienist, State of Illinois; Diplomate of American Board of Psychiatry and Neurology.

Published by Lea & Febiger, Philadelphia, 1941. Price, \$5.50.

The general medical practitioner does not usually prefer to treat patients with nervous and mental conditions. Various reasons are advanced for such a course. When it is fully understood that at least one-third and up to three-fourths of

all the people who seek the services of the general practitioner can be reached and are benefited by psychotherapeutic methods of approach, it becomes clear that a large field of medical practice is not entirely appropriately worked up.

The book under review is almost ideally designed for the everyday needs of the general practitioner in city, town and country alike. In plain everyday common-sense language the author presents a large amount of valuable information and suggests the various therapeutic agencies and devices which are generally and specifically applicable to the individual patient and which promise a reasonable measure of success.

The book makes the comparatively new attempt to present men, women and children who live today as they are in their biologic, psychologic, sociologic setting and inter-relationships. The cases cited are taken from actual practice. The author's theories or psychopathology are less orthodox than is usually the case, but more in actual relationship with actual life situation, and his understanding, his approach and his therapy is sincere and successful and his devotion to his patients and his service is admirable. Every medical reader of this book will be eminently better qualified to serve his patients and will learn to enjoy serving those who suffer from emotional and mental aberrations.

"Synopsis of Diseases of the Heart and Arteries"

By: George R. Herrmann, M. S., M. D., Ph. D., F. A. C. P., Professor of Medicine, University of Texas; Director of the Cardiovascular Service, John Sealy Hospital; Consultant in Vascular Diseases, U. S. Marine Hospital.

Second Edition.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$5.00.

This edition, like its predecessor, is an outline of most of the generally accepted facts, developed and arranged in a simple pyramiding way so well employed by successful pedagogues. The material included is up-to-date. Special emphasis is placed on diagnosis and treatment. Much new material has been added, including a new chapter on the methods recommended by military authorities for use in the examination of men for service in the defense forces. The teaching material used by the American Heart Association has been found very useful and has been followed generally.

"The March of Medicine—New York Academy of Medicine Lectures to the Laity, 1940"

Published by Columbia University Press, New York, 1941. Price, \$2.00.

This, the fifth collection of lectures inaugurated five years ago by the New York Academy of Medicine, contains highly interesting information as to the development and care of the mentally ill; chemical treatment of disease; stories of the blood and its circulation as well as of the disease producing viruses. Perhaps the most interesting lectures culturally are "The Ascent from Bedlam" and "The Romance of Bronchoscopy."

"A Primer for Diabetic Patients"

An Outline of Treatment for Diabetes with Diet, Insulin and Protamine-Zinc Insulin Including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions

By: Russell M. Wilder, M. D., Ph. D., F. A. C. P., Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Head of Section on Metabolism Therapy, Division of Medicine, The Mayo Clinic.

Seventh Edition, Reset.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$1.75.

The Primer is written in readily understandable language for the use of diabetic patients. It contains the substance of instructions as they are given at the Mayo Clinic Diabetic School. The information is not given for the purpose of encouraging self-treatment. In fact, it is clearly stated that no diabetic patient can afford to try to get along well without coöperation with and from his physician. The book is most especially addressed to those patients who have to work for a living but whose life is complicated by the existence of diabetes mellitus.

"Oral Pathology"

A Histological, Roentgenological, and Clinical Study of the Diseases of the Teeth, Jaws, and Mouth

By: Kurt H. Thoma, D. M. D., Professor of Oral Surgery, and Charles A. Brackett, Professor of Oral Pathology, Harvard University.

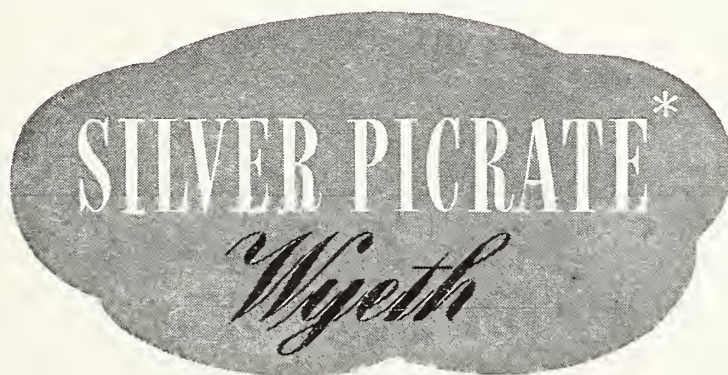
With 1370 Illustrations.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$15.00.

The book under review is the outcome of an ever-increasing interest in the study of pathology of the mouth, teeth and adjoining areas which are of special interest to the dentist, the dental surgeon and the oral hygienist. The alert dental diagnostician is given a great deal of valuable advice, much of which may be handed over to his patients. A large amount of information given deals with developmental anomalies, abnormal development, pathologic new-growths, metabolic disturbances, as well as chemical and mechanical defect formation. The student is encouraged to learn to visualize the various disease processes from its traceable beginning to its final termination. Physicians and surgeons too will find much valuable information in this text.

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)



A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

"Effective Living"

By: C. E. Turner, A. M., Sc. D., Dr. P. H., Professor of Biology and Public Health, Massachusetts Institute of Technology; Formerly Associate Professor of Hygiene, Tufts Medical and Dental Schools; Formerly Director of Health Education Studies, Malden, Massachusetts; Chairman, Health Section, World Federation of Educational Associations; and Elizabeth McHose, B. S., M. A., Director of Physical Education for Girls and Chairman of the Health Council, Senior High School, Reading, Pennsylvania.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$1.90.

Modern youth is looking for and hopes to receive factual scientific health education. The authors of the book under review think they have gathered together much of what is useful, reliable, and generally accepted information based on present-day knowledge. The text is rich and reasonably complete and is aimed to develop and maintain the optimum capacity for successful healthy living. At the end of each chapter there is a self-checking list and it is expected that the reader makes free use of this in order to attain well-rounded, self-directed general individual health and welfare.

"Infantile Paralysis — Anterior Poliomyelitis"

By: Philip Lewin, M. D., F. A. C. S., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School, Professor of Orthopedic Surgery, Cook County Graduate School of Medicine; Attending Orthopedic Surgeon, Cook County and Michael Reese Hospitals; Consulting Orthopedic Surgeon, Municipal Contagious Disease Hospital, Chicago.

Illustrated by Harold Laufman, M. D.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$6.00.

Between 1916 and 1939 about 170,000 persons residing within the United States have been more or less seriously crippled by anterior poliomyelitis. The expected yearly total poliomyelitis morbidity toll ranges from 1,000 in non-epidemic regions to over 20,000 in epidemic areas. Of these about 10% may become crippled. Looking at the picture in its entirety it means that one child in every 10,000 of population, i. e. 1/100%, stands a chance to succumb. If this is your child, however, it is 100% so far as you are concerned. The parents of children afflicted with poliomyelitis look to their family physician for definite information and successful help.

The author of the book under review places all cards on the table. He places the responsibility for appropriate prevention of deformity squarely before the physician treating a child suspected of suffering from an acute attack of anterior poliomyelitis. He expects every practitioner to be fully and reliably informed concerning the various phases of the disease, as well as the anatomical after defects which can be corrected with appropriately prescribed and correctly constructed mechanical appliances. All phases of the disease, as well as the various phases of surgical and mechanical correction of deformities and the phases of convalescence, are fully and comprehensively described. From all appearances this book contains information very vital to every one whose duty it is to treat children suffering from acute poliomyelitis and to prevent or correct the many possible deformities. Since "Poliomyelitis is the most dreaded of all the infectious diseases that attack children," and since "Orthopedic care begins immediately after the diagnosis of poliomyelitis is made or suspected," the duties of those caring for such a child become crystal clear.

"Textbook of Pediatrics"

By: J. P. Crozer Griffith, M. D., Ph. D., Emeritus Professor of Pediatrics in the University of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatricist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; and A. Graeme Mitchell, M. D., B. K. Rachford, Professor of Pediatrics, College of Medicine, University of Cincinnati; Medical Director and Chief of Staff of the Children's Hospital of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital.

Third Edition, Revised and Reset.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$10.00.

"Textbook of Pediatrics" is a new edition of "Diseases of Infants and Children." Since pediatrics as a medical specialty deals with the early phases of human life, health and welfare it must reach into all fields of medical knowledge and it must teach the application of that knowledge. It is admittedly difficult to incorporate all available useful knowledge into one average-sized textbook. However, the authors of this work have admirably succeeded in this task. The finished product should meet with the full approval of the medical reader practicing pediatrics as a general practitioner.

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A Clinical Study of Obstetrical Paralysis

CARL W. RUHLIN, M. D., Bangor, Maine

The flaccid type of paralysis occurring during a small percentage of deliveries is to be considered an injury to the cords of the brachial plexus accompanied by a soft tissue, and occasionally an osseous lesion. This condition is a distinct clinical entity and forms the basis for the observation derived from one hundred and ten cases, three of which were bilateral making a total of one hundred and thirteen arms. These cases were studied for the purpose of arriving at a true clinical picture and a valuation of the treatment.

This clinical entity is well known to those physicians dealing with obstetrics. Sniellie (1768) gave a complete and detailed description of this lesion. Four years later Duchenne¹ while examining children for electrical reactions, concluded the lesion was purely a paralysis. Kennedy,² Taylor,³ and Sharpe⁴ at operation described lesions involving the brachial plexus. The neurological theory was accepted without question. In 1910, Lange⁵ and Thomas⁶ in a clinical review of several cases found signs which were indicative of injury to the shoulder joint capsule. Vulpius⁷ describes lesions of the upper humeral epiphysis and believed this to be the underlying factor in the development of the lesion.

Three distinct types were noted when considered from the topographical viewpoint,

namely, the upper, lower, and whole arm type. The upper arm or Erb type included those cases in which there was a disability of the shoulder muscles but no loss of function of the elbow or hand. The lower or Marie Klumpke arm type offered for examination a loss, total or partial, of the hand, forearm, and elbow, and in which normal musculature of the shoulder was evident. The whole arm type involved the musculature of the entire extremity, partial or total.

- (1) Upper arm type, 54 arms.
- (2) Lower arm type, 18 arms.
- (3) Whole arm type, 41 arms.

The diagnosis of a birth injury should not be difficult, and is often recognized shortly after birth. The lesion is of the lower motor neuron type and the clinical picture is characteristic. The paralyzed arm lays limply by the side as a useless member and is not brought into active motion as is the opposite extremity when the child cries lustily. Muscular contracture is not in evidence when external stimuli are applied to the affected member. Sensory disturbance is rare, but complicates the picture as the response to stimuli in the new born is not too reliable.

The untreated cases show an early return to normal but as the case reaches the period of chronicity, contractures at the shoulder

joint are the usual complicating factor. There were only fifteen (15) cases or 14% of our cases which were free from contractures. These cases were seen early and were all under thirteen weeks of age. One case only six weeks old was observed to have a definite contracture about the shoulder girdle. It is evident from this clinical observation that contractures occur early and with more rapidity than one would expect from purely a nerve lesion.

Internal rotation of the arm was the commonest deformity and was noted in 70% of the cases in this particular series. Adduction, pronation, flexion contracture of the elbow, supination and external rotation were observed in that relative order.

Internal rotation	77 cases, or 70%
Adduction	75 cases, or 68%
Pronation	55 cases, or 50%
Flexion elbow	12 cases, or 10%
Supination	3 cases, or 27%
External rotation	3 cases, or 27%

The characteristic deformity of adduction and internal rotation was noted in the lower arm type as well as the upper and the whole arm types. In no case was extension of the elbow noted as a permanent contracture. Whether the response to healing was rapid or slow, contractures usually occurred.

Atrophy of the arm was severe enough to be noted in 70 cases or sixty-three percent of the one hundred and thirteen arms. This characteristic sign was most severe about the shoulder girdle and the hand, often involving the entire arm to such an extent that two and one-half inches of shortening was recorded in one case. The cause of the atrophy is two-fold: firstly, a trophic disturbance due to the involvement of the peripheral nerves, and secondly an atrophy of disuse due to the rigidity of the shoulder girdle, resulting from muscular, capsular, and ligamentous injury. Atrophy was less pronounced and returned more quickly to normal in the cases which were observed early and physiotherapy instituted to prevent contractures, maintain and increase muscle tone.

Sensory disturbance was noted in only one case that reported for treatment late. Sensory disturbance was difficult to elicit on the new born or very young infant, as the re-

sponse to stimuli was unreliable. When sensory disturbance does occur it must readily return to normal as complete restoration of sensation was seen in cases which reported for treatment late in the chronic period.

The position of the foetus and the disproportion between it and the birth canal seems to be the major factors in producing an injury to the brachial plexus. The deliveries complicated by a presenting arm or an after-coming arm in the breech presentation, produced the greatest number of injuries. The Caesarian section is not without its danger, as two cases in this series were delivered in this manner. One of the cases delivered by Caesarian section resulted in a bilateral case of the whole arm type of birth palsy.

Eighteen cases were known to have received an injury to the shoulder at birth, following a difficult delivery. One of these cases had a large supraclavicular hematoma. Twenty-three cases in our series of obstetrical paralysis were delivered by forceps. One case delivered by forceps had a cerebral injury, made manifest by spastic lower extremities, which complicated the diagnosis of obstetrical paralysis. The left upper extremity was flaccid. Three cases were of exceptional interest as each child was the second in the family which had received a birth injury resulting in a flaccid paralysis of the upper extremity.

Relation of deliveries to Obstetrical paralysis.

Normal	9 cases, or 8%
Forceps	23 cases, or 20%
Known injury to arm	18 cases, or 16%
Caesarians	2 cases, or 2%
Breech	8 cases, or 7%
Versions	3 cases, or 3%
Transverse	1 case, or 1%
Brow presentation	1 case, or 1%
Hard delivery	37 cases, or 34%
History unknown	8 cases, or 7%

Without doubt, it is often necessary to subject the foetus to severe trauma. One case was observed as having a bilateral tear of the sterno-cleido-mastoid muscle, which was later recognized as an area of fibrosis in the muscle bellies.

Every degree of lesion may occur from a simple stretching of the plexus to an avulsion

of the roots of the plexus. The greatest damage in this series resulted when associated with a birth fracture of the clavicle. In six cases where the clavicle was fractured, the paralysis resulted in a severe whole arm type. Reviewing these statistics, it seems that when the clavicle fractures during delivery a major protection of the brachial plexus has been removed, and that after fracture of the clavicle continuous traction is disastrous to the plexus.

Organization following an injury results in a fibrosis about the brachial plexus and shoulder girdle. This fibrosis not only offers a resistance to regeneration but also produces an irritation to the axons which are intact.

Dislocation of the shoulder has been observed in cases which have reported for treatment late in the period of chronicity. In no case under twelve weeks of age was a dislocation noted. Dislocation was only seen after contractures had taken place and these dislocations were upward and posterior in relation to the glenoid fossa. Another factor which makes one believe the dislocations are a result of the contractures and not an etiological factor is the return of the humeral head to the glenoid fossa on release of the contractures. In no case was recurrent dislocation of the shoulder observed.

Injury to the periarticular structures was verified at open operation (arthrolysis). There was increased thickening of the capsule with evidence of tear in the supraspinatus tendon.

Other associated abnormalities with their frequency may be seen in the compiled list following. These changes involved thirty-two cases and there were thirteen distinct changes:

X-ray Readings:

- (a) Thirty-two cases involved, or 29%
- (b) Thirteen distinct changes.
 - (1) Disturbance of upper femoral epiphysis 10 cases
 - (a) rudimentary head .. 1 case
 - (b) small head 7 cases
 - (c) flat head 1 case
 - (d) cysts of head 1 case
 - (2) Fracture of clavicle 6 cases
 - (5 cases seen in whole arm type)
 - (1 case seen in upper arm type)
 - (3) Elevation of scapula 4 cases
 - (4) Shallow glenoid 3 cases

- (5) Bony growth in glenoid .. 1 case
- (6) Sprengel's deformity 3 cases
- (7) Hooked acromion 3 cases
- (8) Hooked coracoid 3 cases
- (9) Fracture of coracoid 1 case
- (10) Dislocation head radius .. 2 cases
- (11) Fracture neck humerus .. 1 case
- (12) Fragilitas ossium with fracture 1 case
- (13) Spina bifida 1 case

When the diagnosis has been made treatment should be instituted immediately. As has been stated previously, contractures appear early and if conservative treatment is expected to produce the desired results with the least amount of effort and time it should be started before contractures set in.

Forty-two cases were treated conservatively and resulted in a satisfactory servicable extremity in forty-one cases or 98%. Conservative treatment is indicated in cases that had a definite paralysis in which there was no deformity or the deformity was mild.

The conservative treatment is one of support and physiotherapy. The arm was placed in an aeroplane type of splint with the arm in 90 degrees of abduction, one hundred and eighty degrees (180 degrees) of external rotation, ninety degrees (90 deg.) of flexion of the elbow with the forearm midway between pronation and supination. Physiotherapy was instituted to maintain or increase muscular tone, and manipulations to prevent or relieve muscular contractures. Care should be taken in fitting the brace, as a frequent fault is the forward flexion of the arm.

The question arises as to how long one should wait if there is no return of function. It is the opinion of most writers to wait three months before examining the plexus. In a review of our cases of supra-clavicular neurolysis (A. W. Ciani, Service of Dr. Arthur Steindler, State University of Iowa Medical School, Department of Orthopedic Surgery) it was thought advisable to wait six months. Contrary to several other writers our cases of supraclavicular neurolysis did not prove satisfactory. The dissection is difficult and the added fibrosis multiplies the dangers. It should only be attempted with a thorough knowledge of the anatomy.

When the muscle disability was due to

contractures too severe to treat by physiotherapy, and not a residual paralysis, the indication was then made for operative interference. The Sever technique is the operation of choice and gives consistently good results. The muscles to be tenotomized depend upon the number of muscles involved in the contracture. The commonest muscles tenotomized were the pectoralis major, subscapularis, coracobrachialis and short head of the biceps. It might be stated here that of the twenty-nine cases of Sever operation selected for final results, ninety-six percent (96%) were good, and one case or four percent (4%) was poor.

All cases selected for operation had a post-operative immobilization period of six to eight weeks. The cases were then placed on a splint similar to the one used during the conservative treatment, and physiotherapy started. In concluding the operative procedure, we may say that it gives consistently good results under the Sever technique, as no untoward results were recorded.

When the forearm and hand do not respond to conservative treatment the indication must be then made to best suit the individual case. This is usually in the form of muscle transplantation which gave satisfactory results in cases which otherwise would have been lost to the list of useful extremities.

Neurolysis is a difficult procedure, requiring great skill and a thorough knowledge of anatomy. Six cases had a supraclavicular neurolysis performed. The plexus was surrounded by fibrous tissue. One case fortunately terminated as a good result.

Many operative procedures would be eliminated from a series of cases were they diagnosed early, and the proper conservative treatment instituted before the onset of contracture.

Several types of operation were used to best suit the individual case.

1. An arthrolysis was performed on one case which failed as dense postoperative adhesions formed limiting the shoulder joint motion.
2. Eleven cases had tendon transplantation done. Good results were obtained in seven cases or 77%. Two cases or 23 percent had considerable improvement resulting

in a useful hand which was not considered strong. None of these cases could be considered a failure.

3. One case had a Steindler flexor plasty of the elbow which had a good result.
4. A hooked acromion which was obstructing abduction had to be osteotomized. This procedure allowed full abduction and external rotation of the shoulder.
5. A Kleinberg Stripping done on one arm resulted in an improvement of function.

TREATMENT IN GENERAL

Conservative and operation combined: 84 cases.

Good	68 cases, or 81%
Fair	13 cases, or 15%
Poor	3 cases, or 4%

All operative cases were followed one year or more.

STANDARD FOR OPERATIVE TREATMENT

- Good: When contractures were relieved and arm became servicable.
- Fair: When condition was improved but release of contracture not complete.
- Failure: When contractures were not released completely enough to improve condition.

CONCLUSIONS

1. Birth palsy is a result of injury to the brachial plexus, muscular, ligamentous, and capsular apparatus about the shoulder joint.
2. The associated deformity is a result of muscular paralysis and contracture which develops early.
3. The disability is a common one. The indications for treatment are well standardized, and the results gratifying.

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The Word Is Cause, Doctor

By P. B. STINSON, Division Director, Vital Statistics, Augusta, Maine

Of late the lexicographers have made familiar a term for which, as usual, the Greeks are to blame, to wit, nosology. This is the study of death causes to assign to a single cause, death from multiple causes. If a death record indicates that a heart condition accompanies a pneumonia, the rules of nosology decide which is the more serious cause. In considering related causes, e. g. peritonitis following appendicitis; or influenza and pneumonia, the reasoning attempts to be from cause to effect so that appendicitis and influenza are made the primary causes and this without much regard to the statement of the physician. Very often the nosologist, following the complicated rules of his trade, well knows that his assignment is not strictly cause to effect but only post hoc propter hoc, as if a cerebral accident accompanied a fall with resultant death. Here the death cause is ruled to be the fall which would probably not have happened without the contributing cause. Whereby we are subjected by casualty companies to official Census Bureau statistics proving that home life is very hazardous indeed. Reasonably, without the falls, whatever enfeebling ailments contributed to the falls presently would have caused the deaths of a great percentage.

From such samples the great weakness of mortality statistics becomes plain: it is simply that weight can be given to only one cause.

However there is little point in the panning the nosologist receives at the hands of the practitioner; no one is more awake to the weaknesses than the International Congress that invented the system and every ten years amends it. A critic with superior wisdom would be welcome at the Paris decennial meeting or at the United States Census Bureau.

The chief working tools of your nosologist are two books, the Manual of the International List of Causes of Death, in which each ailment of mankind is assigned to a number, and the Manual of Joint Causes of Death.

The first is the work of the Fifth International Commission at Paris in 1939. The second is the work of the Census Bureau. This is the text that rates each cause of death against every other and, barring exceptions, names the fatal cause. Every enlightened country uses the International List, but so far no common methods of deciding among joint causes have been generally adopted. Using our own Joint Cause Manual are only Australia, New Zealand, the Philippines and the island of Ceylon, a very strange assortment. So it happens that comparative death rates between countries can be very misleading, since the items depend not only on diagnosis but somewhat on geography. A few years ago Timothy F. Murphy, M. D., who hails from Lewiston and long with the Census Bureau as Chief Statistician, undertook to have the nosologists of several countries assign primary causes to 1,032 selected death records where two or more causes were listed. In an elaborate tabulation recently completed, we find such amazing diversities as this:—while 59 of these 1,032 cases were assigned by the United States system to pneumonias, the Turkish system found no fewer than 209 and the Danish only 28. It is to be understood that the test list was not a run-of-the-mill list but made up of selected multiple causes many of them debatable. However, international comparison of specific death rates are plainly not entirely comparable. If one reads in the journals that the Danes are singularly free from upper respiratory infections and the Turks correspondingly affected (vide rates) it is perfectly in order to ask, "Says who?" It does make a difference who says.

The Census Bureau is constant in urging clearer diagnosis on death certificates not minimizing that medical men are apparently charter members of the "Rugged Individualists," who take advice very slowly indeed. Diagnosis does improve with the years, but as yet is by no means unexceptional. Here is a crude sample. In the first annual statistical

report for Maine in 1892, there were 780 deaths assigned to "old age": in 1937 only 138, rates of 118 and 17 per 100,000 respectively. The inference is not that old age was formerly a more important death cause, which it definitely was not, but that of the 780 so diagnosed in 1892, a least 662 would have died of something else if they had been living in 1937. How often "old age" is justified as a cause of death must be left to the physician's conscience. It is notable that the Deacon's One Hoss Shay came to such an end and the event was considered so remarkable that an enduring rhyme was made around it.

The chief complaint of nosologists is that the doctors use descriptive terms instead of the answers to what? how long? and in the case of external causes, where? when? and how? External causes get the worst of reporting. It is common to have a record of nothing more illuminating than "Fractured Skull" on it, leaving to the imagination whether there had been a homicide or something taken with the afternoon tea. To save time your nosologist clips the daily newspaper for such cases whereby he may learn that the deceased was in an automobile accident or fell off the roof at such a place on such a date, all of which must go on the transcript to the Census Bureau. After all the thing desired is the Cause of Death. Vagueness derives from such terms as "failure," "decompensation" and the like which are by no means Causes but Effects of something often unnamed. Hemiplegia is a prize exhibit. It seems to a layman that the medical man should not forget that he is first of all a scientist not a poet. There are a thousand commonly used words that could be deleted without any loss. We cite anasarca, anorexia, ascites, asthenia, cachexia, collapse, coma, debility, degeneration, dropsy, dyspnea, emaciation, exhaustion and so through the alphabet. Which one of these terms is any improvement on the colloquial "all in?" Or any more useful for assigning a cause of death? Records with only such purely descriptive terms must be assigned to the head-

ing "Cause of Death, Not Specified or Ill-defined." The tribal medicine man probably impressed his clientele with some such terminology but your nosologist finds no magic in Latin. Senility, senile dynamia or senile euthanasia are to him simply "old age," and cardiac failure and cardiac disease are still only heart failure, and an unnamed heart ailment, something to ask the doctor about. Occasionally on receipt of an answer to a query of such terminology, it is finally disclosed that the cause of death is as elemental as, say, cancer. Such surprises bring with them feelings of frustration. One begins to wonder about other causes too well hidden to query and to wonder about the soundness of his statistical findings. Particularly must deaths of women of childbearing age be looked askance. For unaccountable reasons strictly puerperal deaths come to be reported with no suggestions of a pregnancy or even fail to mention a childbirth.

Strangely the quality of death reporting vary in the several sections of the State. One city's doctors are outstanding. It would be safe to guess that in that city, physicians commonly make use of such a work as the "Commonwealth Fund Standard Nomenclature of Disease." Certain hospitals obviously use it and most very definitely do not.

Every hour of the working day good men and better machines work rapidly to report as intelligently as may be on the two chief facts of life, namely birth and death. Of birth the fact alone is the essential but of death the usefulness to the practitioner and researcher is limited only by the soundness of reporting by the physicians. Please remember it isn't the plumber or the village blacksmith for whom this work is being done. Try also to remember not to be too put out by receipt of one of those form letters of inquiry; the Census Bureau people need the answer in order to report to you on the state of the nation and your own Director of Vital Statistics needs it to report on the state of the State.

Examination of applicants for industrial employment presents an invaluable method for detecting, and thereby isolating, tuber-

culous infection in the general population.—A. C. REID, M. D., *Jour. Indust. Hyg. and Toxicol.*, Oct., 1940.

*Anent Preventoria**

The following material may prove of value to those physicians interested in the preventorium problem. The results obtained from the nation-wide questionnaire are particularly pertinent:

"My dear Doctor Corper:

"I am enclosing my report upon the survey of forty replies to our questionnaire. In the round table discussion at our state association meeting, it was considered that our action in this state in closing the children's wards in the state sanatoria was necessary to allow the beds for active adult cases, but regrettable. 'Until the state can provide a centralized service for test-positive children from homes broken by tuberculosis, we must encourage the public spirit of local groups and private agencies, and we approve the summer camp as a proper extension of the case-finding and educative work done by the schools of Maine in the discovery of tuberculosis. Potentially tuberculous children taught in summer camps carry the lessons of tuberculosis-prevention back into the home more effectively than outside instruction.' It was voted to send a circular letter with a pledge of nursing service assistance to every service club in the state, as a suggestion of a splendid outlet for those desirous of a worthwhile project. The 'foster home substitute' was considered too impractical to discuss, even if occasionally possible.

"At the close of this meeting, I sent all of these replies to Dr. John Hawes of Boston by his executive secretary. As the challenger in the discussion of values in preventoria, I knew he would be much interested. It is with very great sorrow that I tell you that shortly after reviewing these answers and informally expressing his opinion about some of the replies, he suddenly died of coronary occlusion. His secretary tells me that he laughed at some of the answers, smiled approvingly at some, and remarked that his faith in the preventorium was not shaken by any criticism here revealed. He had remarked that it was to be regretted that doctors had waves of

enthusiastic advance, and waves of correction of over-enthusiasm, that we were all devoted to the care of children, and many of the parties to this discussion would 'work around' to the resumption of all that is intelligent practically useful in the protection of children from tuberculosis. This rather tragic touch I am adding because I know you would be personally interested in it.

"In recent years, I have had to be more and more concerned in this city and state, in homes as well as in schools, for case-finding and educational work in the protection of children from tuberculosis. I am more and more appreciative of the public health nurse. There is more potential value to the public in the nurse than in the doctor, for we can advise, but she has to do the work. I am satisfied that there is a great opportunity for a statewide organized 'preventorium service,' mostly nursing service."

"Yours very truly,

(Signed) "CHARLES B. SYLVESTER, M.D."

At the annual meeting of the Maine Public Health Association, the report of the chairman of the Tuberculosis Committee was largely given to a survey of the activities in each and all the states for childhood protection against tuberculosis. The following questionnaire had been sent to the tuberculosis association of each state:

1. Do you provide in your state any form of preventorium service?
2. Have you ever provided such a service and given it up?
3. Why was it given up?
4. If such a preventorium service is maintained at the present time, how is it supported?
 - (a) By the state?
 - (b) By private agencies?
5. If such a service has never been provided, what are you doing in place of it for the prevention of childhood tuberculosis?

* Reprinted from the *Bulletin*, American Academy of Tuberculosis Physicians, Volume 3, Number 1, January, 1939.

6. How is medical care and treatment for the child under five years of age provided?

Answers were received from thirty-nine states and the District of Columbia. To question No. 1 there were 29 answers "Yes" and 11 "No." To question No. 2 there were 11 answers "Yes" and 26 "No." Some answers were too indefinite to classify, and some were accompanied with a comment which apparently changed a "yes" to "no." For instance, from one state a "no" to No. 1 is followed by the statement that several *counties* have preventoria, further described for non-active contacts and test-positives. Several answers inferred that the question is in regard to a state-owned *building* named a "preventorium," which obviously limits the form of the answer. Apparently the word "preventorium" has meant one thing in New England and another in the west. Hence a striking disagreement between replies of Massachusetts and California, but why is there a similar difference between New York and Pennsylvania?

It perhaps illustrates the difference in point of view to quote one state answer: "We are trying to hospitalize the person who has tuberculosis and allow the child to stay at home." From adjacent state: "Unless we have a compulsory hospitalization law, taking the adult out of circulation is not always possible. If it were, should we neglect the infected children who according to our national and local statistics do not get well spontaneously in the kind of a home where they have contracted this communicable disease?"

The replies from a majority of the states are regretful that they are doing so little for the prevention of tuberculosis in youth. But the answers from one eastern and two western states mention their superior discernment in the discovery that money can be saved by shutting off such service. To quote: "Twenty-five local associations operate child health camps—we have been *successful* in persuading a number to give them up as unduly expensive. Money could be expended for more constructive measures." "The League conducted a summer health camp six weeks designated a 'preventorium.' Expense caused the League to abandon it, but a fine institu-

tion for *child care* took its place." "The children's unit at the state sanatorium, for non-active cases, is not a *preventorium*." In connection with this last quotation, on a visit to the preventorium in this large and increasingly wealthy state, I learned that it was built by a great fraternal order which deeded the building to the state as a preventorium. The state then changed—the name merely—to "Children's Unit," and carries on the purpose for which it was intended.

One progressive state has for its letterhead: "... maintains preventive, educational and case-finding service with the Christmas seal sales." Its answer to Question 1 is: "No"; they did not notice that their answer contradicts their letterhead. Do they ignore any significance in the word "preventorium"? Perhaps the answer does not concede that the prevention of familial tuberculosis is preventorium service.

The most thought-provoking answer is accompanied with a brief prepared by the Anti-Tuberculosis Association and presented in legal form before the probate court, in regard to the interpretation of a will bequeathing a considerable "fund for the erection and equipment of a children's preventorium, being a sanatorium for the prevention and cure of tuberculosis among children." In an attempt at harmonizing different opinions, the brief reviewed the statements of the leaders in tuberculosis work, and the recommendation to the court is a compromise between a building and the prevention of tuberculosis among children as a state-wide service aside from the building. It recommended the larger part of the bequest for such *service* instead of for the "preventorium of the old-fashioned type." The use of the word "old-fashioned" as above reveals a popular tendency to label the failures "old-fashioned"—not the successes. It does not reflect credit upon tuberculosis workers in any state to have so obviously failed in the educative purpose of a preventorium, and to have been satisfied to make it a boarding house for children.

To question No. 6, only a few replies described any special attention to tuberculosis in children under five years. The usual answer was: "General hospital or pediatric service."

Continued on page 215

From the Secretary's Office

The Council of the Maine Medical Association in session, July 24, 1941, at Squaw Mountain Inn, Greenville, voted that Adam P. Leighton, M. D., of Portland, be appointed a Committee of One to Investigate Collection Agencies.

I am pleased to inform you that Doctor Leighton has accepted this appointment and has requested that the following message be incorporated in the JOURNAL:

"Please write or contact Dr. Adam P. Leighton of Portland (192 State Street) if you have had unfavorable or unhappy results with any collection agency. Kindly give name and address of such organization.

Adam P. Leighton, M. D.,
Committee to Investigate Collection Agencies."

I would like to add to this message the suggestion that you contact Doctor Leighton before placing any accounts for collection with any person or agency for information regarding same.

In accordance with the ruling that Delegates to Out-of-State meetings be appointed by the President with the approval of the Council, Harry Butler, M. D., of Bangor, Maine, has been appointed delegate to the 1941 annual meeting of the Vermont State Medical Society to be held in Burlington, Vermont, October 2nd and 3rd.

The Fall Clinical Session will be held in Portland, Thursday and Friday, October 16th and 17th. This will be a two-day session with a dinner meeting on the evening of the 16th. An excellent program, to be published in the October issue of the JOURNAL, is being arranged by the Cumberland County Medical Society and the Scientific Committee of the Maine Medical Association.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

Editorial

Regarding the Conservation of Gasoline

The people of New England have always been willing to make any contributions toward the National Defense. The present dire emergency is no exception, but it would seem that a better and more willing coöperation might result if the people as a whole understood the necessities of the reason for the reason of conserving fuel oil and gasoline. Talk with the average man and it will be found that no few see any reason why restricted hours should be in effect and many do not realize that the New England states consume more than one-fourth of all the gasoline and fuel oil delivered to the states on the Atlantic seaboard. In the first six months of 1941 in Maine, the increase of tax-paid gasoline was something over 7 million gallons. Our consumption of petroleum products is not only rapidly increasing, but, what is most unfortunate, our capacity to obtain them is decreasing. Within a short time, the whole east-coast area is faced with the fact that approximately one-third of its tanker ships will be operating in the "shuttle service" so that the imperative supply of gas and oil will be maintained for England. It seems needless to call attention to the necessity of this service being operated at the highest possible degree of efficiency. Certain areas of the Atlantic coast are faced with different conditions than others. New England has a long and severe winter, as a whole, which we in Maine know is not a theory. The use of fuel oil for industry and heating homes, plus the requirements of gasoline for modern transportation, has rapidly increased in the last few years, so as a matter of fact we are actually worse off than one-third of our usual capacity to transport petroleum products.

Through the power invested in his office, Mr. Ickes has announced rules and regulations now in effect and, with his usual tact and delicacy, threats as to further restric-

tions if the results obtaining from the present methods do not furnish the desired results. If the problem of insufficient transportation obtains in any section of the country, it is easy to agree with Governor Sewall in his statement that "the people of Maine will gladly do their part, but fair treatment is a necessary ingredient in solving the problem." Washington, which probably means the office of Mr. Ickes, describes the restricted hours on gasoline sales as "the first steps toward COMPULSORY restrictions on the use of motor fuel." It can, however, and should be pointed out that fair and definite provisions should be made for the emergency requirements of physicians and all others who are forced in line of duty and need to make trips at night. A bitter winter night in northern New England demands that sufficient gasoline be in the car or truck, or obtainable in case of emergency, to insure a guaranteed supply for the round trip. Death can easily overtake the driver of a car or truck on a winter night under some conditions. Nothing but a commonsense understanding of the absolute necessity of this provision is required, so that the imposed restrictions do not inflict a penalty on those who must travel after closing hours under any possible conditions, any time and anywhere.

Again, it can be said that individually and collectively coöperation will result and obtain if and when the reason of this order, or request, as it is called, is fully understood and explained. Threats of penalties and reprisals come poorly from any office of the government unless absolutely obligatory. Physicians and others whose duty demands that their ways of transportation be assured as far as humanly possible are not asking for unfair and unwarranted consideration; they are asking for fair play and the exercise of that commodity on the part of certain officials and bureaus.

County News and Notes

Franklin

The annual outing of the Franklin County Medical Society was held on August 24, 1941, at Andrews Camps, Allen's Mills, Maine. Fifty-five members and guests were present. A delicious shore dinner was served on the lawn in front of the camps overlooking Clearwater Lake. For entertainment boating was enjoyed by all. The Society wishes to thank Mr. Charles Sinskie, Mr. Del Johnson, Mr. Phillip Folger and M. B. Colley, M. D., for their kindness in giving of their time and the use of their boats for the pleasure of the members and guests. Credit for the success of the outing goes to A. E. Floyd, M. D., C. C. Weymouth, M. D., and M. B. Colley, M. D., the committee in charge.

Following the dinner Frank L. Springer, M. D., President of the Franklin County Society, made a few remarks and then introduced P. L. B. Ebbett, M. D., of Houlton, President of the Maine Medical Association. Doctor Ebbett called the attention of the Society to the following:

Suggestions are earnestly solicited for the improvement of the work of the Association at large.

The Clinical Session to be held in Portland, October 16th and 17th. An excellent program has been arranged by the Scientific Committee of the Maine Medical Association and the Cumberland County Medical Society.

The annual meeting of the Maine Medical Association to be held June 21, 22, and 23, at Poland Spring.

The special work required of the Association as a result of the war, and in connection with this the suggestion that it might be well to form a Ladies' Auxiliary to this Association, provided the ladies desire it.

The Bingham Associates offer of courses in X-ray technic, dietetics, laboratory technique, etc., to prepare persons to fill the vacancies now existing in several hospitals in the State as many of the present technicians have been called into government service.

LORRIMER M. SCHMIDT, M. D.,
Secretary.

Washington

The fall meeting of the Washington County Medical Society was held August 15, 1941, at 6.00 P. M. at the Brooks Bluff Dining Hall at Robbinston, Maine.

Following a very fine dinner the meeting was called to order by the President, P. J. Mundie, M. D., of Calais. Minutes of the last meeting were read and approved.

Doctor Skinner of St. John, N. B., the principal speaker of the evening, gave a very interesting paper on *Asthma* following which a general discussion took place in which all members participated.

Thomas A. Foster, M. D., of Portland, was the next speaker. It was a great pleasure to have our Past President at this meeting as it had been impossible to arrange a meeting with him at the time of his presidency. Doctor Foster spoke of the work of the Maine Medical Association.

It was voted to send a letter of good wishes to E. H. Bennett, M. D., of Lubec.

Doctor Capello of Lubec had entered his name

for membership and this matter was referred to the Board of Censors.

A general discussion concerning participation in the F. S. A. program was held and Norman E. Cobb, M. D., was appointed delegate, and P. J. Mundie, M. D., alternate, to meet with other representatives in Bangor.

There were nineteen members and guests present.

Respectfully submitted,

JAMES C. BATES, M. D.,
Secretary.

Coming Meetings

State Medical Societies

Maine Medical Association - Cumberland County Medical Society

Annual Fall Clinical Session—Portland, Thursday and Friday, October 16-17, 1941. Program to be published in the October JOURNAL.

Vermont State Medical Society

B. F. Cook, M. D., 154 Bellevue Avenue, Vermont, Secretary.

Annual Meeting—Burlington, October 2-3, 1941.

County Medical Societies

Kennebec County Medical Association

Frederick R. Carter, M. D., Augusta, Secretary.

September 18, 1941—Gardiner General Hospital, Gardiner.

November 20, 1941—Sisters' Hospital, Waterville.

December 18, 1941—Augusta State Hospital, Augusta.

Anent Preventoria—Continued from page 212

I have had opportunity in the past year to personally observe child clinics, health schools, and preventoria in actual operation in the different states. The work of public health associations, anti-tuberculosis associations and state health bureaus in the public schools in the United States is universally successfully progressive. There are some differences in the technique in the earliest discovery of tuberculosis which are debatable and therefore interesting. There are some human interests, prejudices, and appeals for public approval in the management of these organizations.

In one state, the title "Preventorium" remains displayed on the institution for boys, while on the girls' building, the sign is now displayed "Health School for Girls." There is an apparent antipathy in many states to the name "preventorium," which amounts to a stigma. This has largely arisen from the economic burden placed upon a public to support a building for whose maintenance no provision had been made. The desire of some to leave a beautiful memorial to their own generosity results in the erection of a building only. It has not been sufficiently recognized that in the protection of children against tuberculosis, endowment must be vastly greater than building, with provision for constantly increasing expense.

Charles B. Sylvester, M. D.

Notices

Return Your Information Card for the American Medical Directory Promptly

About September 1, an information card will be sent from the headquarters office of the American Medical Association to every physician in the United States and Canada. The information secured is to be used in compiling the Seventeenth Edition of the *American Medical Directory*.

The directory is prepared at regular intervals in the Biographical Department of the American Medical Association. The last previous edition appeared in 1940. This volume is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States; it has been especially valuable in the medical preparedness program. In it, as in no other published directory, are dependable data concerning physicians, hospitals, medical organizations and activities. The directory provides full information concerning medical colleges, specialization in the field of medical practice, memberships in special medical societies, tabulations of medical journals and medical libraries and, indeed, practically every important fact concerning the medical profession in which any one might possibly be interested.

Before filling out the information card, read the instructions carefully. Physicians are especially urged to state whether or not they are on extended active duty for the medical reserve corps of the United States Army and Navy. Fill out the card and return it promptly whether or not a change has occurred in any points on which information is requested. If a change of address occurs before March 1, 1942, report it at once. Should you fail to receive a card before the first of October, write at once to the headquarters office stating that fact and a duplicate card will be mailed.

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
Tayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

State of Maine

Board of Registration of Medicine

Adam P. Leighton, M. D., Secretary, Portland.

List of physicians passing the State of Maine Board of Registration of Medicine—Examinations at Augusta, Maine, July 1 and 2, 1941.

Paul Ernest Black, M. D., 40 Central Street, Wakefield, Mass.

Freeman Fletcher Brown, Jr., M. D., 480 Herkimer St., Brooklyn, N. Y.

Lawrence Perley Cogswell, M. D., 217 North Beacon St., Hartford, Conn.

Henry Perrene Colmore, M. D., 103 East 65th St., New York, N. Y.

George Geyerhahn, M. D., St. Joseph's Hospital, Parkersburg, West Virginia.

Charles Lengyel, M. D., St. Mary's Hospital, Cincinnati, Ohio.

Edgar John Smith, M. D., 3 Carey Lane, Waterville, Me.

Jack Jean Squire, M. D., 1391 Madison Ave., New York City.

Harold W. Telge, M. D., 1779 Elm St., Manchester, N. H.

Philip Pickering Thompson, Jr., M. D., 7 Ship Channel Road, South Portland, Me.

Roderick Louis Tondreau, M. D., 12 Oak St., Brunswick, Me.

Robert Dwight Vachon, M. D., St. Mary's General Hospital, Lewiston, Me.

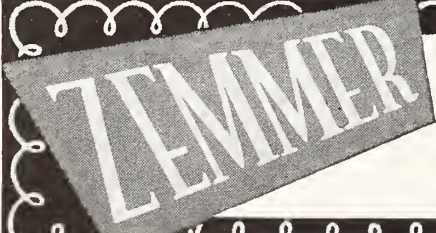
Donald Judson Winslow, M. D., 65 Fenwood Road, Roxbury, Mass.

Herbert Zikel, M. D., Community Hospital, Rumford, Me.

Through Reciprocity

Edward James Alessi, M. D., Central Maine Sanatorium, Fairfield, Me.

Continued on page 224



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Necrology



William Arthur Ellingwood, M. D.
1883-1941

William Arthur Ellingwood, M. D., died at his residence at Rockland, Maine, August 30, 1941, at the age of 58. He had been in ill health for some time.

He was born in Pittsfield, Maine, May 31, 1883, the son of Frank O. and Emma Grant Ellingwood. He was graduated from the former East Maine Conference Seminary at Bucksport, Maine, and received his degree of M. D. at the University of Maryland in 1908. He served his two-year internship at the Presbyterian Eye, Ear, Nose and Throat Hospital in Baltimore, Maryland, and in 1910 began practice at Winterport, Maine, moving to Rockland in 1916 after a post-graduate course at Johns Hopkins University.

Doctor Ellingwood was a former president of the Knox County Medical Association, had served as president of the Medical Officers of the World War of Maine, and was a member of the Maine Medical Association, the American Medical Association and the American Academy of Ophthal-

mology and Otolaryngology. For the past six years he had been delegate from the Maine Medical Association to the conventions of the American Medical Association and had attended the sessions in Cleveland this year. He had served as Councilor for the Third District of the Maine Medical Association since 1932, having been re-elected to serve his fourth term at the June, 1941, annual meeting at York Harbor. He was Chairman of the Council in 1934-1935. For some time he had served as Chief of the Medical Staff of the Knox County General Hospital.

Doctor Ellingwood's hobby was horse-racing and he had owned several horses. He had often served as a judge at races throughout Maine.

He was a member of the Masonic Order and the Elks.

Doctor Ellingwood is survived by his widow, Mrs. Ruth Kellam Ellingwood, and three sons, William A., Jr., Richard, and Herbert.

Book Reviews

"Infantile Paralysis"

One of the first things that can be said of this book is that it is not merely "another report." Published by the National Foundation for Infantile Paralysis it consists of a series of six lectures delivered at Vanderbilt University in April, 1941. As the preface of the book says: it represents an effort of the National Foundation to present a résumé of the present day knowledge of this disease. It also truly says that the medical profession and the public it serves are entitled to *know* both the extent of the advance and the limitations of the contributions of science to the solution of the manifold and intricate problems of poliomyelitis.

The lectures were given by men whose position and opportunities warrant confidence in what they have to say. The book is not one for summer reading by the "busy practitioner." It is one to be studied and studied carefully by every one interested in this disease and who is not? Ober is specific and to the point in his chapter on treatment and he speaks from experience for which, as yet, there is no substitute. The lectures give a clear-cut, fair and honest picture of poliomyelitis, as it has been developed to date, and the physician who studies it well will have a very good understanding of what can be done in way of prevention, diagnosis, medical and surgical care.

"Abdominal Surgery of Infancy and Childhood"

By: William E. Ladd, M. D., F. A. C. S., William E. Ladd, Professor of Child Surgery at Harvard Medical School; Chief of Surgical Service, The Children's Hospital, Boston; and Robert E. Gross, M. D., Associate in Surgery, the Harvard Medical School; Associate Visiting Surgeon, The Children's Hospital; Associate in Surgery, The Peter Bent Brigham Hospital, Boston.

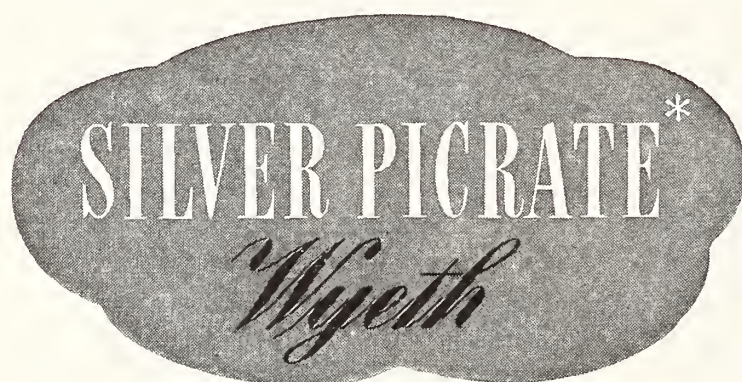
Illustrated.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$10.00.

This work has been written chiefly with the intention of developing better methods of examination, better pre-operative and post-operative care, and to show the necessity for the employment of superior surgical skill in the removal of anatomic and pathologic obstructions to an infant's well being. It is devoted to surgery only so far as it involves chiefly children's abdomens or parts which can and must be approached surgically by the abdominal route. The contents of the book deals with the accumulated knowledge of twenty-five years of expert surgical experience.

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)



A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

Proceedings

AT THE

EIGHTY-NINTH ANNUAL SESSION

OF THE

Maine Medical Association



HELD AT

Marshall House

YORK HARBOR, MAINE

JUNE 22, 23, 24, 1941

FIRST MEETING OF THE HOUSE OF DELEGATES, JUNE 22, 1941

The first session of the House of Delegates of the Maine Medical Association convened at the Marshall House, York Harbor, Maine, on Sunday, June 22, 1941, at four forty-five o'clock in the afternoon, with Dr. P. L. B. Ebbett of Houlton, President-elect of the Maine Medical Association presiding.

CHAIRMAN EBBETT: The meeting will please come to order, Gentlemen.

We will first have the roll call of the delegates and our Secretary will call the roll.

(Secretary Carter called the roll, and the following delegates responded:)

Androscoggin:—Merrill S. F. Greene, M. D., Lewiston. Alternate:—R. N. Randall, M. D., Lewiston.

Aroostook:—Frederick L. Gregory, M. D., Caribou; Harold E. Small, M. D., Fort Fairfield.

Cumberland:—Franklin A. Ferguson, M. D., Portland; Edward A. Greco, M. D., Portland; Elton R. Blaisdell, M. D., Portland; Philip H. McCrum, M. D., Portland; Richard S. Hawkes, M. D., Portland.

Franklin:—George L. Pratt, M. D., Farmington.

Hancock:—Marcus A. Torrey, M. D., Ellsworth.

Kennebec:—Howard F. Hill, M. D., Waterville; Samuel H. Kagan, M. D., Augusta; Blynn O. Goodrich, M. D., Waterville.

Knox:—James Carswell, Jr., M. D., Camden.

Oxford:—Henry M. Howard, M. D., Rumford.

Penobscot:—Forrest B. Ames, M. D., Bangor; Ernest T. Young, M. D., Millinocket.

Piscataquis:—Harvey C. Bundy, M. D., Milo.

Waldo:—Foster C. Small, M. D., Belfast.

Washington:—Norman E. Cobb, M. D., Calais.

York:—Carl E. Richards, M. D., Alfred; Charles W. Kinghorn, M. D., Kittery. Alternates:—James H. Macdonald, M. D., Kennebunk; Edward M. Cook, M. D., York Harbor.

CHAIRMAN EBBETT: A quorum being present, we will proceed first with the appointment of a Reference Committee. On that Committee, I would like to appoint Forrest B. Ames of Bangor, as Chairman, Merrill S. F. Greene of Lewiston and Frank Ferguson of Portland.

For the Nominating Committee, I would like to appoint for the First District, Carl E. Richards of Alfred; Second District, George L. Pratt of Farmington, who will act as Chairman of the Committee; and the Third District, Philip O. Gregory of Boothbay Harbor; Fourth District, Howard F. Hill of Waterville; Fifth District, Norman E. Cobb; Sixth District, Harold E. Small of Fort Fairfield.

CHAIRMAN EBBETT: The next order of business is the report of the Council, and I am going to ask Dr. Carl H. Stevens of Belfast, Chairman of the Council, to give that report.

(Dr. Stevens then read his prepared report of Council Meetings held at Rangeley Lake, June 25, 1940; College Club Inn, Searsport, August 4, 1940; Bangor, October 17 and 18, 1940; Augusta, December 19, 1940; and of Council Business transacted by mail.)

At today's meeting of the Council, the total budget approved for 1941-1942 was \$7,650.00.

CHAIRMAN EBBETT: Before we go into that, perhaps we had better have the acceptance of that report, and we will take the budget up afterwards.

You have heard the report of the Council for 1940-1941. What is your wish that we do with it?

DR. SMALL: I move that this report of the Council be accepted.

This motion was duly seconded and was carried.

CHAIRMAN EBBETT: Now, before we go any farther, Dr. Jackson desires to make an announcement.

DR. FRANK H. JACKSON of Houlton: The only announcement I wish to make is to just please remember that the transactions of this House of

Delegates are very important. They are a matter of record in your Association. They are kept; they are published. If any member feels that he would like to say something off the record, please say so to the reporter and it won't be included. Each man who makes a motion, and each who seconds a motion and each discussant of a motion should give his name. It makes it easier for us when we go through this rather voluminous record. If any of you have been following the trial of the American Medical Association in the District of Columbia by the Department of Justice, you can see the necessity of being careful of what you say and who says it.

There is one other matter I should like to call to your attention and to the attention of the Nominating Committee. Dr. Gehring has resigned from the Committee on Investigating Collection Agencies. Dr. Gehring acted as a lone member. He was very careful about it. It is the custom of the JOURNAL that it will not print any advertising of any agency until and unless it has the approval of that Committee or a Committee of like nature. I think it is a very important Committee, and I would like to make the suggestion, not as a member of the House of Delegates, but simply as Editor of the JOURNAL, that you perpetuate this Committee, and have either one man or two men, and I would like to suggest that you have two, and Dr. Carter would be one of them, because they have the opportunity of looking up these fellows. In fact, there was one not long ago, and we were able to stop him from doing a lot of business. He had a plausible story, and it looked good and sounded good, but it wasn't so good. As a matter of fact, when you signed on the line, all you did was to make them a Power of Attorney. You know what that is. I think that is all I have to say.

CHAIRMAN EBBETT: Thank you, Dr. Jackson. We will now have the report of the Budget Committee by Dr. Stevens.

DR. STEVENS: The report of the Budget Committee is as follows, for 1941-1942. The total appropriation of \$7,650 was made, as against \$7,700 the preceding year. This is to be divided as follows:

President's Expenses	\$ 300.00
Salaries:	
Secretary-Treasurer	1,200.00
Assistant Secretary	1,500.00
Office Expenses of the Secretary-Treasurer and the Portland Office	1,150.00
Medical Advisory Committee	650.00
Graduate Education	300.00
Other Committees	100.00
State Delegates and Council	200.00
Delegate to the American Medical Association Annual Session	150.00
Annual Session	100.00
Clinical Session	250.00
Appropriations to JOURNAL Expenses:	
Salary of the Editor	1,000.00
JOURNAL	750.00

Regarding the office expenses of the Secretary-Treasurer and the Portland Office of \$1,150 against an appropriation the former year of \$850, I want to say that this is because of the fact that they have moved from this room in the Maine General Hospital to the Congress Building, and the rental will be \$300.

The total amount expended in 1940-1941 was \$6,344.28.

CHAIRMAN EBBETT: You have heard the report of the Budget Committee. What is your pleasure that we do with this report? Shall we take it up item by item or collectively?

DR. GEORGE L. PRATT of Farmington: I move that we accept the report of the Budget Committee.

This motion was duly seconded by Dr. Henry C. Knowlton of Bangor and was carried.

CHAIRMAN EBBETT: We will next hear the reports of the delegates to the various societies. First, we will have the report of Dr. William A. Ellingwood of Rockland as Delegate to the American Medical Association. Dr. Ellingwood!

Mr. President and members of the Maine Medical Association.

The 92nd session of the American Medical Association was held in Cleveland, Ohio, June 2-6, 1941. The headquarters were located at the Statler Hotel. The standing committees had arrived in advance. The reports had been made ready for presentation when Dr. H. H. Shoulders of Nashville, Tenn. Speaker of the House called the house to order at 10 a. m. on June 2, 1941.

After the usual order of business and the Speaker had presented his list of reference committees the reports of the standing committees were read and referred to the proper committee for approval.

Secretary West reported the present membership as of April 1, 1941, 118,441. Also that he had been informed since his arrival in Cleveland that it was now well over 119,000. In 1939 the membership was 113,113.

169 delegates were seated. Several of the American Boards held examinations previous to the opening session.

The opening of the general meeting took place on Tuesday, June 3 at 8 p. m. in the Music Hall of the Cleveland Public Auditorium. Together with the usual addresses of welcome by the Governor and Mayor and announcements by the Chairman of the local Committee on arrangements was the introduction and installation of the President-Elect Frank H. Lahey of Boston. Also presentation of medal to retiring President Nathan B. Van Etten.

SCIENTIFIC PROGRAM

Special exhibits on lame backs and fractures were continued again this year. Symposium and panel discussions were a feature of this annual session in the scientific assembly.

On Tuesday, June 3rd, the general scientific program was held in the Cleveland Auditorium under the chairmanship of J. Gurney Taylor and consisted of 11 fifteen minute papers on topics pertaining to American Medicine and the National Defense.

The innovation of providing six small theatres for the projection of silent and sound motion pictures introduces a feature of the scientific exhibit which will undoubtedly grow in interest and importance.

The transfer of motion pictures from the exhibit booths to the theatres has many obvious advantages. It is now quite apparent that pictures, particularly those in natural color, provide a teaching medium of increasing importance. There were 84 moving pictures daily and there were 520 participants which made this scientific exhibit one of, if not, the best yet.

This report would fail in its mission if it did not give particular recognition to the ability, tactfulness and tireless effort of Dr. Thomas G. Hull, Director of the Scientific Exhibit, the outstanding feature of the annual session of the A. M. A.

SECTION PAPERS

Practice of Medicine, 17; General Surgery, 19; Obstetrics and Gynecology, 16; Ophthalmology, 15; Otolaryngology, 14; Pediatrics, 8 papers and panel discussion on endocrine disorders of adolescence and another under the direction of Haven Emerson on Public Health in our schools; Pharmacology and Therapeutics, 19 together with a joint meeting of the section on the practice of medicine on Friday; Pathology and Physiology, 20; Nervous and Mental Diseases, 12, and one panel discussion on Neuro-surgical treatment; Dermatology and Syphilology, 18; Preventative and Industrial Med-

icine and Public Health, 11 papers and a joint meeting with the section of Pediatrics; Urology, 18; Orthopedic Surgery, 18; Gastro-Enterology and Proctology, 17 papers and a panel discussion under the leadership of Dr. Sara Jordan of Boston; Radiology, 15; Anesthesiology, 14.

Associated with a large number of these papers were scientific exhibits bearing on the respective subjects.

SUMMARY REPORT

BOARD OF TRUSTEES

Meetings of the Board of Trustees were held in February, June, September and November in 1940, and meetings of the Executive Council of the Board were held every month except during April, July, October and December.

BUSINESS OPERATIONS

INCOME AND EXPENDITURES

Gross income from all sources for the year 1940 was \$1,876,353.80. Income received from Fellowship dues and subscriptions was \$776,202.44. Exceeding the income from the same source in 1939 by the sum of \$24,320.42. Income from the sale of advertising space amounted to \$969,581.25, an increase over 1939 of \$60,670.67. Interest received on investments amounted to \$80,571.90, which was \$4,367 less than in 1939. Bonds matured, sold or called during the year amounted to \$276,959.38, and bonds were purchased at a cost of \$245,593.75. The cost of paper used in the JOURNAL was \$1,500 greater than in 1939.

Expenditures on accounts of the various councils, bureaus and departments of the association, including the newly established committee on Medical Preparedness were \$482,510.35.

Miscellaneous expenses including fees for legal services amounted to \$194,507.82.

At the present time 636 persons are employed by the association.

The net income for the year 1940 was \$187,768.30.

The invested and uninvested funds as of December 31, 1940, were \$2,527,191.89.

The net paid weekly average circulation of the JOURNAL in 1940 was 98,002.

DIVISION OF DRUGS AND FOOD

REPORT OF THE COUNCIL ON PHARMACY AND CHEMISTRY

During 1940 the demands made on the Council of Pharmacy and Chemistry have severely taxed its facilities. The Council by giving prompt consideration to the evidence and support of the new Chemotherapeutic agents that have been produced has attempted to coöperate to the fullest extent with the U. S. food administration.

Among important reports prepared by the Council were those dealing with the therapeutic value of Sulfathiazole and Sulfamethythiazole, two derivatives of Sulfanilamide.

Vitamins have continued to receive particular consideration by the Council, especially questions relating to Vitamin D milk.

AWARD OF DISTINGUISHED SERVICE MEDAL

The names of James Ewing and Simon Flexner of New York, and Ludvig Hektoen of Chicago were presented to the House of Delegates as candidates for the award of the Distinguished Service Medal.

James Ewing, who was given the award by the House, was born in Pittsburgh on December 25, 1866. He graduated from the College of Physicians and Surgeons in New York in 1891.

Dr. Ewing flew from New York to Cleveland to be present at the opening of the general meeting on Tuesday evening, June 3, and after the presentation of the Distinguished Service Medal by the newly elected President, Frank H. Lahey, he returned to New York by plane.

According to the By-Laws, any Fellow of the A. M. A. may submit a nomination for the Distinguished Service Medal.

Five of the names thus submitted are passed by the Committee on Distinguished Service Awards to the Board of Trustees which elects three. These are voted on by the House of Delegates.

Former winners of the Medal:

In 1938 at San Francisco, where Rudolph Matas, Simon Flexner and Ludvig Hektoen were nominated, Rudolph Matas was awarded the medal.

In 1939 at St. Louis, where James B. Herrick, Chevalier Jackson and Edward Jackson were nominated, James B. Herrick was awarded the medal.

In 1940 at New York, where Chevalier Jackson, James Ewing and Ludvig Hektoen were nominated, Chevalier Jackson was awarded the medal.

The President-Elect Fred W. Rankin, of Lexington, Kentucky, was graduated from the University of Maryland School of Medicine in Baltimore in 1909.

He was resident surgeon at University Hospital, Baltimore, from 1909-1912, and assistant in surgery from 1913-1916. From 1916-1923 he was assistant surgeon at St. Mary's Hospital, Rochester, Minn., and for a limited time was Professor of surgery at the University of Louisville, Kentucky. From 1926-1933, Dr. Rankin was associate Professor of surgery in the University of Minnesota Graduate School, the Mayo Foundation and surgeon to the Mayo Clinic, Rochester, Minn.

Dr. Burke, one of the Attorneys of the Association, informed me that litigation was pending against the association or its officers with the following law suits filed:

Dr. Jean Paul Fernel—\$1,000,000 libel.

William E. Balsinger—\$100,000 libel.

Muriel Longini—\$1,000 claim.

J. Thompson Stevens—\$350,000 libel.

U. S. of America—Conspiracy in restraint of trade.

Mr. Burke feels that in his opinion all these suits will be defeated.

In connection with the last suit mentioned I will read a supplemental report* of the Board of Trustees of the American Medical Association to the House of Delegates of the American Medical Association.

REPORT OF THE COMMITTEE ON MEDICAL PREPAREDNESS

This report is too long to read in full so I shall read only certain sections inasmuch as in due time all of these reports will be published in full in the *Journal of the American Medical Association*.

Registration

Total registration, 7,412.

Registrants from New England:

Massachusetts	257
Connecticut	60
New Hampshire	19
Vermont	8
Rhode Island	16
Maine	19

CHAIRMAN EBBETT: I am sure we have all enjoyed listening to this excellent report of Dr. Ellingwood. What shall we do with it?

DR. CARL E. RICHARDS of Alfred: I move that we accept the report of Dr. Ellingwood, as Delegate to the American Medical Association, and that it be placed on file.

This motion was duly seconded by Dr. Forrest B. Ames of Bangor and was carried.

CHAIRMAN EBBETT: Next is the report of the Delegate to Connecticut, Dr. Eugene E. O'Donnell of Portland.

DR. EUGENE E. O'DONNELL: Mr. President and members of the Maine Medical Association. The Annual Connecticut meeting was held at the Stratford Hotel in Bridgeport, on May 21 and 22. Perhaps many of you know that the Stratford Hotel is

a commercial hotel, and lacks many of the advantages of the resort hotel such as the Marshall House here at York Harbor, so that the meeting was entirely a business meeting, well, a business and professional meeting, and it didn't offer any of the social advantages of a meeting such as our annual meeting.

There were approximately four hundred members of the Connecticut Society who registered, and I was personally very pleasantly met by Dr. Landry, the President, and Dr. Clark, the Secretary of the Connecticut State Medical Society. I also had the opportunity to meet the delegates from the other New England States, and from New York and New Jersey, and to extend the greetings from Maine to the Connecticut Society.

The Annual Dinner was held on the evening of the first day, Monday being the first day, and there was an address by a gentleman whose name I can't recall at the moment, but he is the President of Trinity College in Hartford. He was a very forceful speaker and gave a very interesting and philosophical talk on "The Problem of Maintaining our Educational Institutions in the present Crisis."

As to the program itself, the Scientific Program was made up of a number of interesting papers on very highly specialized, but, I thought, more or less unrelated subjects.

There was no effort during the program to represent all of the fields of medicine. In fact, there was not a single paper on General Surgery during the meeting.

The Ladies were not present at the meeting.

There were two things that I thought were worth noting. One was the presence of a very adequate amplifying system in the hall during the address by the main speaker of the evening, and the other was the fact that the meeting was also a joint meeting with the Connecticut Nurses' Association, the Connecticut Hospital Association, and the various other allied medical associations. So that those associations had an opportunity to get together and exchange ideas. It was a very interesting sojourn for me, and I was very glad to get back to Connecticut and renew old acquaintances and associations.

Thank you very much. [Applause.]

CHAIRMAN EBBETT: I am sure we like to hear how the various societies conduct their meetings. It is very interesting to us. Often we gain valuable thoughts by attending these various meetings. What shall we do with Dr. O'Donnell's report?

DR. KNOWLTON of Bangor: I move that we accept the report of Dr. O'Donnell.

This motion was duly seconded by Dr. Harvey C. Bundy of Milo and was carried.

CHAIRMAN EBBETT: Next comes the report of the Delegate to Massachusetts, Dr. Theodore E. Hardy of Waterville.

DR. THEODORE E. HARDY: Mr. Chairman and Delegates of the Association. It was my privilege and pleasure, for which I am grateful, to have attended the 160th Annual Meeting of the Massachusetts Medical Society, which was held at the Copley Plaza in Boston on the 21st and 22nd of May, 1941.

Their program consisted of four general sessions. At noon on the first day, they had a luncheon Conference. At night on the first day, they had their annual dinner, followed by the annual Shattuck Lecture.

The General Assembly Program was well arranged by their Committee, it being more or less unified. On the morning of the first day, it consisted chiefly of Dietary Deficiency. In the afternoon, it consisted of obstructive lesions involving the intestinal tract and the peripheral vascular system.

* Published in the *Journal of the American Medical Association*, June 21, 1941, Page 2791.

I was not able to attend the Luncheon Conference at noon, but I did talk with Dr. Nye and Dr. Phippen, who worked the attendance of these conferences out, and I might report that they were well attended and they were well enjoyed. This is the nearest that they have come to our Conference idea.

The Annual Banquet was held, as I said, the night of the first day, and my one criticism there was that the hall was crowded. The waiters had difficulty serving us.

The attendance at the general meeting was greater than anticipated, and it was extremely hot; it was nearly as hot as it is today.

The President, Dr. Phippen, introduced the incoming officers, Dr. Frank Ober being the new President; then he introduced Dr. Van Etten, President of the American Medical Association. He said that due to the condition that existed there, he would say just a few words, and then he proceeded to reach into his pocket and pull out a manuscript, and he gave us a very detailed report on what Dr. Ellingwood has just covered regarding the litigation against the American Medical Association, and also on the defense angle.

Then, it was only fair that Dr. Frank Lahey, the President-Elect of the American Medical Association and a member of the Massachusetts Medical Society, should be called upon, and he said very few words and made an excellent impression.

The Annual Shattuck Lecture was given by Dr. Alton Ochsner of New Orleans. He spoke of Thrombosis and Thrombosed Phlebitis, and he presented a wonderful paper. He stated that he had put a lot of time on his paper, inasmuch as he expected Dr. John Homans to be present, listening intently to it.

The morning session on the following day consisted of papers on Endocrine subjects, and then again we came to the Military Symposium in the afternoon. There was a distinct military atmosphere present. The Commander of the Chelsea Navy Yard had ordered all physicians to attend the meeting in uniform. They were scattered about, here and there.

I must speak of the scientific exhibits. They were of a very high calibre, as might be expected, with Boston the teaching and the hospital center which it is, and I enjoyed these very much. And I want to thank you for sending me as your delegate to the Massachusetts meeting. [Applause.]

CHAIRMAN EBBETT: You have heard the report of Dr. Hardy regarding the meeting of the Massachusetts Society. What is your pleasure to do with this report?

DR. AMES of Bangor: I move that we accept this report and that it be placed on file.

This motion was duly seconded by Dr. James Carswell of Camden and other members present and was carried.

CHAIRMAN EBBETT: The next order of business is the report of the New Hampshire Society by Dr. William T. Rowe of Rumford.

DR. WILLIAM T. ROWE: Mr. Chairman and Delegates of the Maine Medical Association. Your delegate attended the New Hampshire Society 150th Annual Meeting at Manchester on May 13 and 14. Just previous to my departure for Manchester, I received a letter from President Tom Foster, saying that he would be unable to be there, and our President-Elect would also be unable to be there. So I had a very busy day the first day that I was there, contacting numerous members of the New Hampshire Society, including Dr. Burpee, Dr. Bowler, Dr. Gile, Dr. McQueston and Dr. David Parker, to whom I had to extend personal greetings and an invitation to attend our meetings here at York Harbor.

The proceedings of the New Hampshire meeting

are very similar to ours. Tuesday morning there were Round Table Conferences, and the afternoons were spent in papers being delivered on different subjects, and informal discussions from the floor followed these papers.

Tuesday evening, the first day of the meeting, an invitation was extended to the members in the form of an innovation. A buffet supper was served at the Manchester Country Club. As it happened to be Ezra Jones' birthday — Ezra was the President of the New Hampshire Society — he was given a birthday party. If any of you know Ezra, you know he is a wonderful fellow, and he has a wonderful baritone voice. Group singing took up a good part of the evening, and it was such a howling success that they voted to continue this sort of thing every year in much the same way.

It is interesting to read on their program how they announced this particular affair. "Buffet supper at the Manchester Country Club. All members, with ladies, invited. No charge. Informal dress. Cocktails for those who wish them. Non-alcoholic punch for those who do not."

Wednesday morning, there was one Round Table Session, after which the General Meeting convened, and Dr. Lahey spoke on the "Management of Lesions of the Stomach and Duodenum."

Later in the day, the reports of the Trustees and the House of Delegates were given.

Wednesday evening, the banquet was held, at which Dr. Lahey spoke on the "Economic Medical Problems of Today."

The New Hampshire Society seems to be fortunate in getting the residents of the American Medical Association at all of their meetings. Last year, I had the pleasure of listening to President Van Etten, and this year I had the pleasure of listening to President Lahey on two occasions.

I should like to report two interesting things that were done by the House of Delegates of the New Hampshire Society. They voted to remit the dues of members who joined the Army and Navy. They were to have full membership in the New Hampshire Society. They also voted that a Committee on Public Health would cooperate in every way with the State Committee on Public Health. Also, they have what they call a Benevolence Fund, and the total of this Fund was \$4,224; I understand that that is given to needy physicians, and that they help to maintain that by assessing a dollar each year from the dues of each member.

The House of Delegates reported also a General Fund of \$10,897. They give a purse of \$100 every year to the best medical paper prepared by any member of the Society. They also give \$1,000 each year to the Dartmouth Medical School for medical students.

Another thing I noticed at the Manchester meeting was that they had an auxiliary club, which seemed to be very active. I don't know whether this has been done in Maine, but I know Oxford County has no auxiliary club, and it seems to me that that is a suggestion which might be considered. They can be active in the Red Cross work, hospital work, and then, also, they can keep control of many of the laity activities that seem to be cropping up so numerously.

As the Delegate to the New Hampshire Society, I extended a cordial invitation to the members to attend our meeting here in York Harbor. [Applause.]

CHAIRMAN EBBETT: Thank you, Dr. Rowe. You have heard Dr. Rowe's report. What shall we do with this report?

DR. FOSTER: I move that this report be accepted and placed on file.

This motion was duly seconded by Dr. Franklin A. Ferguson of Portland and was carried.

Continued in the October Issue

Continued from page 216

Richard S. Buker, M. D., Hebron, Me.

Sidney R. Gehlert, Jr., M. D., Eagle Lake, Me.

Reed Harwood, M. D., 61 Griggs Road, Brookline, Mass.

Walter Paul Havens, Jr., M. D., Jefferson Hospital, Philadelphia, Pa.

Julius H. Hurst, M. D., 3842 Garrison Street, N. W., Washington, D. C.

Ella Langer, M. D., Tripp Lake Camp, Poland, Me.

Kenneth Alexander Laughlin, M. D., 131 State St., Portland, Me.

Homer Edson Lawrence, M. D., 1530 Seward Ave., Detroit, Mich.

John Gerald Maurice Olmstead, M. D., 404 Farmington Ave., Hartford, Conn.

67th General Hospital

The hospital unit sponsored and organized by the Maine General Hospital has been accepted by the War Department under the classification of an "affiliated general hospital" under the direct control of the Surgeon General's Office. This means that medical officers assigned to it will not be called to active service unless the unit as a whole is mobilized for service in a theater of operations.

The unit, when mobilized, will have a capacity of one thousand beds, with complete equipment as a general hospital. On the professional services there will be thirty-two officers of the Medical and Dental Reserve, one hundred and twenty nurses and four hundred enlisted men. Officers are commissioned in the Medical Reserve in the grades commensurate with the positions which they are to fill in the unit.

At the present time there are six vacancies to be filled, as follows: three captains on the Medical Service, one major on the Surgical Service, and one captain and one 1st lieutenant on the Eye, Ear, Nose and Throat Service. These are open to properly qualified doctors practicing in Maine, whether or not they are active members of the Maine General Hospital staff. Any medical man who is interested may obtain full information from the Unit Director, Dr. Roland B. Moore, 201 State Street, Portland, Maine, or from Dr. Elton R. Blaisdell, 12 Deering Street, Portland, Maine, who is Chief of Medical Service in the unit.

To be eligible as a major the applicant must be between 39 and 44 years of age; captains must be between 35 and 39 years of age; all below 35 years are commissioned as first lieutenants.

Announcement

The College of Physicians of Philadelphia awarded the Alvarenga Prize on July 14, 1941, to Dr. John J. Bittner of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine, in recognition of his distinguished studies on cancer.

This Prize was established by the Will of Pedro Francisco DaCosta Alvarenga of Lisbon, Portugal, an Associate Fellow of the College of Physicians, to be awarded annually by the College of Physicians on each anniversary of the death of the testator, July 14, 1883, to the author of the best memorial upon any branch of medicine, which may be deemed worthy of the prize.

Physicians Casualty Association

The Physicians Casualty Association of America has made a reduction in the \$25.00 per week accident and health insurance, of \$1.00 per year; in the \$50.00 per week accident and health insurance, of \$2.00 per year; and in the \$75.00 per week accident and health insurance, of \$3.00 per year.

Academy of Ophthalmology and Otolaryngology Meets in Chicago October 19-23, 1941

The forty-sixth annual meeting of the American Academy of Ophthalmology and Otolaryngology will be held at the Palmer House, Chicago, October 19-23, under the presidency of Dr. Frank R. Spencer, Boulder, Colorado.

The academy's program consists of one general scientific meeting on the morning of the first day, separate programs for the two specialties on alternate afternoons and instructional courses every morning beginning on Tuesday.

The feature of this year's general opening meeting will be a symposium on vertigo, with Dr. Francis H. Adler, Philadelphia, representing ophthalmology; Dr. William J. McNally, Montreal, otolaryngology, and Dr. Bernard Alpers, Philadelphia, neurology. Among papers to be presented during the remainder of the week will be the following:

Dr. Alfred W. Adson, Rochester, Minn., Surgical Treatment of Vascular Diseases of the Orbit.

Dr. Albert N. LeMoine, Kansas City, Mo., Allergy and ophthalmology.

Drs. John H. Dunnington and Maynard Wheeler, New York, Operative Results in 200 Cases of Convergent Strabismus.

Dr. W. F. Petersen, Chicago, Otolaryngological Problems and the Weather.

Dr. Mark J. Schoenberg, New York, The Problem of Preventing Partial or Total Loss of Vision in Glaucoma Patients of Eye Clinics.

Dr. Charles T. Porter, Boston, Practical Uses of Chemotherapy in Ear, Nose and Throat Work.

Dr. Rea E. Ashley, San Francisco, The Use of Urea in Certain Diseases of the Ears, Nose and Throat.

Dr. Alfred J. Cone, St. Louis, Treatment of Sinus Diseases in Children.

Dr. Frederick T. Hill, Waterville, Maine, What Otolologists Can Do For Defective Hearing.

During the convention there will be various meetings of small groups, including the "Teachers' Section," secretaries of local eye, ear, nose and throat societies and alumni organizations. The meeting of the teachers' section will be concerned especially with the role of the Academy in national defense during the present emergency. There will also be a scientific exhibit that will include such subjects as "Ocular Conditions in Children Due to Systemic Disease," "Conduction of Sound in the Ear," "Hemophilia and Other Blood Dyscrasias as Manifest in the Eye, Ear, Nose and Throat," "Cancer of the Larynx" and "Significance of the Eyegrounds in the Problem of Hypertension."

Alternating with the scientific programs of the specialties each afternoon will be an elaborate motion picture program. Thus when the section of ophthalmology is meeting for formal presentation of papers, motion pictures on otolaryngology will be available for those interested in that field.

Dr. Perry Goldsmith, professor of otolaryngology in the University of Toronto Faculty of Medicine, Toronto, Ont., will be the academy's guest of honor this year.

Officers of the academy in addition to Dr. Spencer are Drs. Ralph Irving Lloyd, Brooklyn, president-elect; Everett L. Goar, Houston, Texas, James M. Robb, Detroit, and Ralph O. Rychener, Memphis, Tenn., vice presidents; and Secord H. Large, Cleveland, comptroller. Dr. William P. Wherry, Omaha, Neb., is executive secretary-treasurer.



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Review of the Literature on Blood and Plasma Transfusions

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The use of blood transfusions as a therapeutic agent has increased to such an extent that one wonders if the indications in every case are clear-cut, and if this measure of treatment is not used frequently empirically. In other words, one should consider whether the blood is used for its oxygen-carrying ability, its antibody content, or because of the plasma proteins.

Blood Banks: The present war has indicated the value of stored blood and plasma. The availability of blood in the large general hospital needs no emphasis, and recently many plans for storing blood or plasma have appeared in the literature. The successful maintenance of a blood bank is chiefly determined by the number of transfusions in any institution. The minimum number would seem to be about 500 per year. Detailed descriptions of the various systems of maintaining a blood bank have been described by Lundy¹, Fantus^{2,3}, Cameron⁴, Ravitch⁵, Reese, and Hart⁶.

Rous and Turner⁷ in 1916 published a report of their studies on preserved rabbit cells which were kept two weeks before hemolyzing, and Robertson⁸ in 1918 stated that preserved blood was used in the British army during the first World War. One disadvan-

tage of the Rous-Turner solution is the volume required (1500 cc., including blood), and also toxicity resulting from the high concentration of citrate (11.4 gms.).

Yudin⁹ in 1936 demonstrated that blood could be preserved for weeks, and that a "blood bank" was a practical service which most medium-sized hospitals could offer. Since that time, numerous reports of successful banks are recorded in the literature^{1,2,3,4,5,6}.

If blood is to be preserved, certain precautions against changes in the blood must be taken.

(1) Hemolysis: It has been definitely shown that hemolyzed blood may cause transfusion reactions and even death (DeGowin et al.¹⁰). These same authors have shown that there is progressive hemolysis in stored blood, regardless of the preservative used. However, hemolysis is only 1/25 to 1/50 as great in blood preserved in dextrose citrate mixture as in citrate alone.

Blood should be stored at temperatures from 0-5° C., since hemolysis is greater as the temperature increases. The initial hemolysis which occurs when blood is added to the preservative solution may be obviated if the flasks are previously chilled to 5° C.

With the solution advocated by DeGowin and his associates, blood may be kept for 30-40 days. This mixture consists of 10 volumes of blood, 13 volumes 5.4% anhydrous dextrose U.S.P. (Merck & Co., Inc.) and 2 volumes of 3.2% sodium citrate (dihydric.).

Excessive shaking of the blood should be avoided, since resultant trauma to the red cells is more likely to destroy the more fragile cells, with the liberation of hemoglobin.

Many banks (Fantus^{2,3}, Ravitch⁵, Hoxworth, and Skinner¹¹) preserve the blood in from 50-70 cc. of 2.5% citrate to 500 cc. of blood. However, blood so kept usually shows hemolysis in about 10 days, and is considered unsafe after this time. Where the number of transfusions is small, the danger of wastage from outdated blood is a major factor, since it is difficult to replace outdated blood unless the institution is fortunate enough to have available a list of voluntary donors or a "transfusion fund" to re-establish the bank when the reserves (blood) have been depleted. Therefore, if blood can be kept for 30-40 days, the hazard of outdated blood is appreciably diminished. Some institutions are salvaging the plasma from the outdated blood and keeping it for several months.

(2) Diffusion of potassium from red cells: There is a normal relationship between serum potassium and that within the erythrocytes. That there is a diffusion of potassium from the red cells into the plasma was shown by Duliere¹³ in 1931. Scudder¹² emphasizes the toxicity of intravenous potassium in his excellent monograph on Shock¹⁴; he describes a case of a patient in shock who was given bank blood. It was his opinion that the patient might not have died if fresh blood containing less potassium had been used.

DeGowin¹⁰ has shown that the diffusion of potassium from the red cells is not inhibited by the dextrose-citrate solution, but they further state that blood stored for 30 days and having high potassium content is not toxic, when transfused at velocities of less than 43.3 cc. per minute.

(3) Sterility: It is obvious that in addi-

tion to securing the blood under aseptic conditions, it is necessary that some sort of closed system be employed, in order that contamination be reduced to a minimum, and also not occur while the blood is waiting to be used. There are several such systems described in detail by users of the blood bank mentioned above.

(4) Other changes: The blood is altered in many ways after storage, and it is because of these changes that the physician should have a clear understanding of the indications for each transfusion.

(a) Leukocytes disintegrate rather rapidly, that is, within 12-48 hours, so that old blood has little value in agranulocytosis, also probably in certain cases of sepsis where granulocytes are needed (Kolmer¹⁵).

(b) Platelets are rapidly lost. Therefore, in thrombopenic purpura, old blood is of little value in preventing further hemorrhages. Hoxworth and Skinner¹¹ state that the blood for patients with thrombopenic purpura should not be over 12 hours old.

(c) Erythrocytes—that red cells hemolyze in preservative solutions is well known. The amount of hemolysis as mentioned above varies with the type of preservative solution employed. DeGowin¹⁰ and associates have shown by quantitative measurements of the hemoglobin in the supernatant plasma of stored blood that there is progressive loss of hemoglobin from erythrocytes. This proceeds at a much slower rate in blood preserved in the dextrose citrate mixture than in blood stored in citrate alone.

If the aim of the transfusion is to replace red cells alone, then the age of the blood is important, not only because of the number of the cells that may be hemolyzed, but also the effect of storage upon the survival time of the transfused red cells. Schaefer and Wiener¹⁶ followed the disappearance of transfused red cells with M and N agglutinogens, and noted no difference in the survival time of freshly drawn blood and that stored for 5-8 days. If, however, 10-20 day old blood was transfused, the erythrocytes could not be demonstrated in the circulation from 1-3 weeks afterwards, in contrast to fresh red cells

which could be found 3-4 months later. Using Ashley's method of making red cell counts with 0 plasma as a diluent, Belk and Barnes¹⁷ found that the rate of disappearance of the transfused red cells was dependent on the age of the blood. After 7 days' storage, the erythrocytes did not survive more than 24 to 48 hours.

(d) Prothrombin:—that there is an increasing loss of prothrombin in stored blood is well known. However, in patients with hemorrhagic diathesis in obstructive jaundice, this deficiency can be supplemented by Vitamin K. The indications for transfusion in such cases should be to replace lost blood as a pre-operative measure, rather than to terminate the hemorrhage by this method of therapy.

The above-mentioned limitations of stored blood may not be present in all cases. The majority of transfusions in the average hospital are given as a means of preventing operative shock, or to increase the blood volume in existing shock. In several reports, Moon^{18,19} has shown the importance of hemocentration. Fresh blood is not necessary, therefore, since the role of the cellular elements of the blood is a minor one, and the chief value is in the osmotic power of the colloids and proteins.

Hoxworth and Skinner¹¹ include a table in their article, giving the length of time blood may be kept for various conditions of the patient. In their experience of over 3000 transfusions, they have found that for hypoproteinemia and shock not associated with toxemia, blood may be kept for 21 days, and for anemia not associated with sepsis and hemorrhagic diathesis, 8 days; in sepsis not over 3 days, and in thrombopenic purpura not over 12 hours.

Transfusion Reactions: Blood transfusion at present is a procedure not entirely unattended by untoward effects, and occasionally results fatally. Individuals giving blood should be aware of the possible dangers, since in some institutions the incidence of fatal reactions has been greater than the mortality of appendicitis. At the Cook County Hospital, preceding the use of the blood bank, Fantus² states that one-third of all patients receiving blood died; however,

he does not attribute all deaths to the transfusions. In a subsequent report³ he feels that practically all reactions due to preserving technique have been eliminated. Of 12,000 transfusions collected from the literature by Tiber²⁰, there was a mortality of approximately 0.18%, and Jewesbury²¹ concludes that if stored blood is used, a febrile reaction is expected in 20% of cases, and rigor in 5%.

There are various types of transfusion reactions, depending on the cause. The etiology of some has remained obscure, but recently investigations in this field have opened the door to a better understanding of the pathogenesis of some of these problems, which are described below.

Most fatal reactions are of the hemolytic variety and practically always can be attributed to the injection of incompatible blood, which in many instances is the result of faulty typing technique. One of the commonest errors is a failure to crossmatch, especially when the donor or recipient may belong to a weak A₂b or A₂ group. Because of the weak agglutinogens in the red cells, the donor may be classed as group B or A, with the result that slow hemolysis may cause a severe reaction terminating with renal failure. If such an error in typing should occur, it would readily be seen in the crossmatching and thus serve as a check on the typing sera, which may have been of low titer or may have lost some of its potency.

It is unfortunate that the conflicting classifications of Moss and Jansky should have gained such popularity, since the resultant confusion has caused incompatible blood to be used by individuals unfamiliar with the classification in use in a particular institution.

Classification:	International	Moss	Jansky
	O	IV	I
	A	II	II
	B	III	III
	AB	I	IV

Most institutions now are using the International classification, because the letters so clearly signify the group by denoting which agglutinin is present in the red cells. When the corresponding small Greek letters are used, they signify the agglutinins present in the serum.

For a detailed description of blood typing, the reader is referred to the excellent article by Wiener²² which appeared in the *American Journal of Clinical Pathology* in 1939.

Universal Donor: Recently, the dangers encountered in using blood from the so-called "universal donor" have received much attention. Hesse²³ in 1935 published the results from several large hospitals. There were 217 hemolytic reactions, 46 of which occurred after the use of "O" blood, 20 of which terminated fatally. He therefore recommends that when O blood is used for other than O patients, not more than 200 cc. of blood should be used at any one time, and only when the agglutinin titer of the donor's blood is less than 1:16. In a recent article by Witebsky²⁴ and his associates, they state that an amendment to the Sanitary Code of New York has been adopted by the Public Health Council, requiring the titration of all O blood when used for other than O group patients.

Witebsky, Kland, and Swanson^{24,25} have developed a method of inactivating the agglutinins which they consider satisfactory in rendering O blood safe. These authors have found this process of great value when blood is needed in an emergency, and the condition of the patient will not permit waiting an hour for a crossmatching. The process consists in brief of adding to O blood anti-A substance (peptone) and anti-B substance (gastric juice of Group B humans). One must bear in mind, however, that this procedure is only applicable to blood of Type O, and the donor's blood should still be typed, unless he is known to be an O by previous typing.

Intra-group incompatibility: Another source of severe and fatal transfusion reactions is seen in those cases of "intragroup" incompatibility where the group of both donor and recipient are the same. Recently, Landsteiner and Wiener²⁶ have shown that anti-rhesus immune rabbit serum contains agglutinins which act on some human red cells. This agglutinable property has been designated as Rh. Wiener and Peters²⁷ have described two cases of "intragroup" incompatibility, one of which, a Group O, died following 5 transfusions of Group O blood.

Microscopic examination of the kidney revealed characteristic hemolytic transfusion reaction. The second case, a Group A, was given several transfusions of Group A blood, and suffered a severe transfusion reaction, but recovered.

The explanation offered by Wiener and Peters is logical, and depends upon the Rh factor described by Landsteiner and Wiener. In brief, they state that most human bloods are Rh+; in other words, most human red cells are agglutinated by anti-rhesus rabbit serum. When blood of a donor who is Rh+ is introduced into a patient who is Rh—, the patient is thus stimulated to form immune antibodies or anti-Rh agglutinins, which can agglutinate and hemolyze Rh+ cells of a subsequent donor. Wiener and Peters answer the question as to why such reactions do not occur more frequently by stating that probably all Rh— individuals are not equally capable of producing Rh antibodies. These same factors are the basis for a new theory on the pathogenesis of erythroblastosis fetalis, advanced by Levine and Stetson²⁸, and by Levine, Katzin, and Burnham²⁹. They cite several cases of erythroblastosis fetalis, the mothers of which contained anti-Rh agglutinins in their sera. The source of the anti-Rh agglutinins apparently results when an Rh— mother is stimulated to form antibodies by an Rh+ fetus. Levine and Polayes³⁰ have presented evidence that severe and even fatal transfusion reactions occurring in pregnancy may result when an Rh— mother is immunized by the antigen (Rh+) of the fetus and then receives blood from the father who is the source of the Rh+ cells in the fetus. They further state that the confusing effects of hemolysis in such cases could be avoided by resorting to the centrifuging technique, without previous incubation, or by performing the tests with inactivated serum.

With regard to the prophylaxis of intra-group hemolytic reactions, Wiener²⁷ states that "no single in vitro technic will cover every exigency, as while most of the irregular isoagglutinins act best at low temperatures, others have been found which react more strongly at body temperatures." He recommends the following technic:

(1) Two drops of patient's serum, preferably separated from the clot at refrigerator temperature, are mixed with one drop of donor's cell suspension in a small test tube.

(2) In a second tube, a similar mixture of patient's serum and patient's cells is set up.

The tubes are placed in ice-water for 5 minutes, then centrifuged while still cold, and the mixtures are gently shaken. The reactions are read both macroscopically and microscopically. If neither tube shows a reaction, the donor is compatible. If both show a reaction, we are dealing with an auto-agglutinin, and the donor probably can be used without danger. If Tube I shows agglutination and tube II does not, the donor is incompatible and others must be tested in order to find a suitable one.

Treatment of Incompatible Reactions: One of the most important effects of an hemolytic reaction is renal insufficiency. The mechanism has been shown by Baker and Dodds³¹ to result from the transformation of hemoglobin to acid hematin in the tubules, with consequent obstruction of the tubules. A similar picture has been produced experimentally in dogs by DeGowin, Osterhagen, and Andersch³². In their experiments, 4 out of 5 dogs on an acid diet died, while all dogs on alkaline diets recovered, when transfused with hemolyzed dog erythrocytes. These observations and experiments are the basis of the present-day treatment of hemolytic reactions, namely, alkalization. The urine can be kept sufficiently alkaline by four 10-grain doses of sodium bicarbonate daily. Ham³³ and others have recommended this procedure as a routine prophylaxis in all individuals who are to receive a transfusion.

Less serious reactions are attributed to citrate, toxic substances derived from rubber tubing, pyrogens in the citrate solution, and clot formation and fibrin in stored blood.

With regard to the citrate concentration, Wiener³⁴, in a recent letter to the editor of the *Journal of the American Medical Association* on June 28, 1941, states that the usual amount of citrate (50 cc. of 2.5% solution) is not sufficient for stored blood, and recommends 50 cc. of 5% sodium citrate for 500 cc. of blood, especially if it is to be stored as plasma.

As a final precaution against reactions, one should employ the "biologic test," which consists of observing the patient for any untoward signs or symptoms for one-half hour after the injection of 20 cc. of blood, or in giving 50 cc. of blood very slowly over a 20-30-minute period, and noting any changes.

Plasma: The present war has stimulated interest in a satisfactory blood substitute for the emergency treatment of shock and hemorrhage. Experimentally, plasma (fluid portion of blood from which cells and fibrinogen have been removed) was used in 1871 by Bowditch³⁵. In 1940, Strumia³⁶ and his associates demonstrated that plasma was as efficacious as whole blood in the treatment of shock; however, much of the recent literature deals with the mode of preserving the plasma. Essentially, plasma may be preserved in either a wet, dry, or frozen state. Strumia and McGraw³⁷ define a proper method of preservation as "one which, in the simplest manner, assures a safe, sterile plasma possessing as many of the original properties as possible, and therefore having the largest therapeutic field of application."

There are many reports in the literature of blood banks salvaging plasma from outdated blood. However, in view of Strumia's³⁷ experience with wet plasma, such a source of plasma would not be safe. He feels that wet plasma kept for any length of time is subject to bacterial contamination, filtration is necessary to remove the precipitate which usually occurs, and there is also a loss of some of the essential elements.

Merthiolate 1-10,000 strength has been used quite generally, and more recently, Novak³⁸ has recommended sulfanilamide as a bacteriostatic agent.

Mayner³⁹ reports one death following the transfusion of stored blood plasma. Wiener³⁴ believes that the death in this case was caused by thrombin in the plasma, resulting from too low a concentration of citrate. Strumia and McGraw³⁷ cite another case in which death followed a transfusion of wet plasma; microscopic examination of the lungs showed many capillaries plugged with fibrin thrombi.

It is not the purpose of this paper to attempt to evaluate the various methods of

drying plasma. Since 1903, sera and bacteria have been preserved by drying in vacuo⁴⁰. More recently, Flosdorf and Mudd⁴¹, in 1935, using the lyophile principle, developed the chemical (cryochem) process of drying in vacuo. In 1940, Hill and Pfeiffer⁴² described another method which they called the "ad-tevac" process. The "desivac" process is now used by several of the commercial biological houses; this was described in 1940 by Flosdorf and Mudd⁴³. A somewhat simpler and cheaper method of concentrating in cellophane cylinders was brought out late in 1940 by Hartman⁴⁴; this method of concentration followed by the process of Flosdorf and Mudd is being used in England by Aylward, Mainwaring, and Wilkinson⁴⁵.

Most of the above-mentioned processes require expensive apparatus, which makes it impracticable for most hospitals. The dry product, however, is superior to the wet, in that it is safer, may be stored indefinitely, requires small space for storage, and can be easily transported.

A third method of storing plasma in the frozen state recently described by Strumia and McGraw³⁷ would seem more practical for the average medium-sized hospital, since the only additional apparatus needed is a freezing unit. The above authors recommend the type of freezing cabinet in use for storing ice cream, or the "Deep Freeze" unit. The advantages of this method are its simplicity and economy, ease of storage and of transportation, optimal preservation of more labile elements, elimination of precipitates and flocculates, and maintenance of sterility.

Indications for Plasma: That plasma is as valuable as whole blood in the treatment of shock has been shown by Strumia³⁶. It is being used extensively for shock^{45,46,47,48,49,50}, and to combat the hemoconcentration in burns by the British in the present war, Black⁵⁰, Aylward, Mainwaring, and Wilkinson^{45,51}.

Plasma had previously been used for burns by Mahoney, and is of great value here, where whole blood transfusions are contraindicated because of the existing hemoconcentration^{19,20,48,51}. It is claimed by Hughes, Mudd, and Streker⁵³ to be of value in lowering intracranial pressure, especially when due to trauma. In nephrosis, the plasma proteins

may be brought up to a normal level with plasma, according to Aldrich, Stokes, Killingworth, and McGuinness⁵⁴.

It would seem advisable, and it has been previously recommended, that plasma storage depots be set up for the treatment of shock, hemorrhage, and burns, among the civilian population, since casualties among this group have been so high in the bombardment of England.

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What Is Dementia Praecox?

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I. SYNTHESSES

The purpose of this paper is to present, in as brief a form as possible, an outline of the *physiology* of normal thinking and of such abnormal mentation as is observed in Dementia Praecox; an outline based on experimental data far too numerous to mention.

The first approach to this subject was, of course, the study of the reflex. Finding that a given stimulus (as a tap on the patellar tendon) resulted in a typical response (as the knee jerk), the assumption was that all behavior is based on reflex-like mechanics; that while in the case of the more simple reflex the center is usually found to be located in the spine, in the case of more complex activities the centers are in the brain where the mechanics are vastly more intricate; hence the infinite variety of responses. According to this view, those processes of the brain centers which constitute the link between the ascending (sensory) neurones and descending (motor) neurones are the ones which are experienced as thinking and feeling.

Of course it is known that many reflex arcs have their centers in the higher layers of the brain. The sight (or smell) of savory food causes a reflex flow of saliva (mouth watering). The recognition of the food for what it is obviously involves brain activity.

Pavlov, experimenting on dogs, discovered what he called the conditioned reflex. He found that if the dinner bell was rung whenever food was presented to the dog, there eventually resulted a reflex secretion of saliva to the sound of the bell, even when no food was presented. Pavlov offered the following explanation of his findings: "In any case it appears that cells predominately excited at a given time become foci attracting to themselves nervous impulses aroused by a new stimulus."¹ In other words, there is a confluence of the processes.

The following are the usual explanations of reflex and conditioned reflex action: The unit of the nervous system is the neurone.

The connecting links in the chain of neurones are the synapses. In the reflex arc the linkages are so strong that the current flows in one direction only. Exercise of any synapse may strengthen its degree of linkage to the extent of that of a reflex, as is observed in habit formation. In conditioning the same thing occurs: the linkages are so strengthened by exercise that the results are similar to those of the unconditioned reflex.

Considering the facts that a synapse may connect or disconnect to a greater or to a lesser degree, we will coin the term *SYNAPTIC INDEX* to indicate the degree of synaptic effect. It is possible that the index depends upon the number (which may be great) of the synapses involved in the arc.

According to the Behaviorists school all activities are reflex or conditioned-reflex acts, the latter based on new "annexes" to the original arcs. But this explanation is inadequate. Suppose one conditioned to salute a flag two feet long: why does he thereafter salute the flag ten times as long? One conditioned to a melody played in a given octave makes the same response to the same melody played in any octave, although each octave involves a different set of neurones. It is obvious that the response is linked, not to the sensory elements, but to the configuration (pattern; gestalt). A configuration is more than the *sum* of the sensory data. The lines involved in the formation of a square compose the square only if *interrelated* in a certain way. If differently arranged they result in a different pattern. Our perceiving not only the four lines but also the pattern, proves that there are neurones concerned with the perception of relations. We will call them *PARASENSORY* neurones.

Here also we discover confluence and its effects. Each line stimulates a different focus. As a consequence, an additional (intermediate) something is stimulated (something which has to do with the sense of relation), hence the additional datum—the configuration. On the basis of these considera-

tions, we suspect that the dog seeing the food and hearing the bell at the same time experiences a sense of relation between them—puts 2 and 2 together.

Let us represent the sensation-group by A plus B (to indicate more than one) and the parasensory elements by X. When A plus B are given, the result is A plus B plus X. A plus B plus X constitute the *perception*, "that which makes a thing out of a group of sensations." Abstract the X and you have a concept, as the concept of a square of no specific dimensions, or the concept of a table of no particular sort. If confluence is the rule, X plus X equal X plus X plus Y etc., etc. Compare these with Goddard's⁴ definitions: "Perception is the realized (conscious) relation between two or more sensations, or between a sensation and its word symbol. Judgment is the realized (conscious) relation between two or more perceptions. Reasoning is the realized (conscious) relation between two or more judgments."

But there still remains the question how it happens that either the one sensation-group (as of the small flag) or the other sensation-group (large flag) leads to the formation of the same X-process. For explanations the reader is referred to other papers by the author.^{5, 6} (Reprints on request.)

Considering all the above, we readily understand how brain injuries reduce integration capacities—render judgment and reasoning difficult or impossible. Gelb and Goldstein⁷ reported a case of cerebral injury which resulted in the inability to perceive such simple configurations as straight lines, curved lines, triangles, etc., though the patient was able to *see* the sensory elements. Holmes and Horrax⁸ reported a case of cerebral injury which resulted in the inability to perceive interrelations of objects. The cases studied by Bender⁹ showed impairment of the mechanisms concerned with the more complex integration, while there was the preservation of the capacity to integrate simpler configurations.

In all these discussions we have left out (for the sake of simplification) considerations of the physiology and mechanics of the emotions which are factors in integration. We will limit ourselves to the statement that,

according to recent findings, there is, besides the sensory-motor arc, another arc having its centers in the higher levels of the brain, one concerned with the subjective experiences and motor manifestations of the emotions. The neurones of this arc go up from the thalamic region to the cortex and down via the autonomic (sympathetic and parasympathetic) system. Many have shown that even the skeletal muscles are innervated by the autonomic system.

II. ANTITHESES AND REVERSALS

Hering¹⁰ and others formulated the idea of reciprocal antagonism of the parts of the nervous system. Even as there are flexors and extensors, vaso-dilators and vaso-constrictors, many, if not all, functioning parts have reciprocating, mutually inhibiting polarities. Sherrington¹¹ has shown that stimulation and inhibition go together. "In all these uses of inhibition we see it as an associate of and a counterpart or counterpoise to, excitation." Because of the working together of the two antagonistic engrams (neurone-patterns) we can speak of them as one engram which is bipolar in character. For convenience' sake we will speak of the functional antitheses in terms of positivity and negativity, and consider these as due to the conditions at the synapses. Thus we will imagine that during the act of flexion the synapses of the flexion mechanism have a positive index—favor conduction—and the synapses at the extension mechanism have a negative index—inhibit conduction. But we will use the terms positivity and negativity in a much broader sense, to include, besides inhibition-excitation polarity, other antitheses, as red-green, sympathetic-parasympathetic, etc., which we will describe as positive and negative arbitrarily.

That there are degrees of positivity and negativity we have already mentioned.

Here and there we see that the antithetic poles are interrelated so that the cessation of activity at one pole constitutes the stimulus for the activation of the opposite pole. Burton-Opits¹² observed that "the relaxation of a previously contracted muscle very frequently incites the contraction of the relaxed antagonistic muscle." The play of after-images, the

seeing green, then red, then green, etc., after looking at a bright red light, as that of the setting sun, is another instance. The same holds true of the activities of the autonomic nervous system. "We must consider some interesting data by Weinberg. He has found that with every increase of attention, *i. e.*, of the level of consciousness, there occurs a reaction of the sympathetic nervous system which is followed by a reaction of the parasympathetic system. The parasympathetic reaction is then again followed by an increased activity of the sympathetic system."¹³

Now if A and B are poles which are mutually antithetic and reacting as above, the inference is that either pole may be excited or inhibited in two ways. Thus A may be excited by an excitatory stimulus at A or by an inhibitory stimulus at B. This mode of indirect influence Sherrington called *INDUCTION*. Pavlov verified the existence of induction. Pavlov also found the following: excitation and inhibition radiate from the point stimulated. In some cases of spreading inhibition, this inhibition is preceded by radiating excitation.² Accordingly, if there is a field of negativity in the path of radiating negativity, the indices in that field will be reversed, at first to positive then to negative (or to greater negativity?). Such reversals are brought about not only by normal functions but also by pathological conditions. "If we inject an animal with ergotoxin, we block the paths of the sympathetic system. If we then inject adrenalin, the latter drug will not be able to travel along its ordinary pathway . . . it will provoke just the opposite . . . adrenalin will (then) irritate the parasympathetic system."¹⁴ The Babinski phenomenon is another instance of reversal pathologically induced.

According to reliable evidence sleep is a condition of inhibition (negativity) which radiates until there is complete engulfment of that field of consciousness. Now if this spreading negativity is preceded by a wave of positivity, there must result, before the final engulfment, the formation of an island of induced positivity, an island soon to become submerged. A similar island obviously forms before complete awakening, an island soon to become a continent. The writer believes that this island formation is the substratum of the

jerky movements of limbs which occur at the point of falling asleep, also of the phenomena of dreams.

The island consists of groups of neurones which, as the result of former exercise, are variously interrelated: high index between some neurones and low index between others; positive index between some and negative index between others. Now what are the effects of the radiating negativity preceded by positivity upon these indices? We can imagine the following possibilities: (a) negatives turned positives and positives turned more positive; (b) negatives turned positives and positives turned negative (the positivity inducing negativity in the formerly positive); in other words, consistent reversals of the indices. The following were Pavlov's findings which have a bearing upon this subject: "Peculiar conditions were observed in the cases of intense drowsiness which fell short of changing into complete sleep. While positive conditioned stimuli had lost their effects, well developed negative stimuli acquired excitatory properties."³ In other cases of drowsiness Pavlov noticed that the more intense stimuli, those which prior to the sleepy state produced greater effects, now induced much weaker effects, and weaker stimuli induced effects exceeding those which they had induced while the animal was alert.

In the above we perceive consistent reversals. We do not, however, expect to find these reversals consistent throughout, since reversal most likely varies with the depth of drowsiness and the latter—most likely—with the locality.

One readily perceives how increased negativity may simulate tissue destruction. That portion of live-wire which does not make contact is of no more use to the system than the live-wire which has been destroyed. In brain-injury we find loss of capacity for the integration of the more complex engrams; and we find the same in that state of semi-sleep wherein dreams are formed. When the sleep is more profound the dream-stuff is extremely fragmentary—a series of disconnected shreds; when the sleep is shallower more complex integrations are possible, greater wholes are realized—fairly interconnected events.

It is obvious that quantity of data depends

upon quantity of neurones. The significance of quantity of data is clearly perceived in the following: Suppose you have a pear-shaped group of dots arranged so that it points to the right. To it you may add dots and distribute them so that the total number will make a pear-shaped group pointing to the left. Here is an analogous situation: It is a clear night. The wind is from the east carrying semi-transparent clouds across the moon. You perceive the moon travelling eastward. Had you no additional data obtained by former observations, you would have been convinced that the moon travelled eastward. The additional data, consisting of the knowledge that the moon rises in the east and sets in the west, leads you to a conclusion which is the reverse of that of your perception. If the neurone routes to those additional data were blocked by negativity due to sleep or some pathological condition, you would remain convinced that the moon travelled eastward. We perceive, therefore, how the contraction of the field of positivity results in that lack of judgment which is found in the dream-state.

A familiar situation is that shallow state of sleep when outer stimuli penetrate and are given wrong interpretations. The other form of dreams, occurring when the sleep is still too deep for the penetration of outer stimuli, most likely takes its "cue" from internal bodily conditions. The dreams of the former type deserve special considerations. Bearing in mind that the partial or complete blocking of a route shunts the current towards a different area, we expect to find during semi-sleep misirradiations of sensory excitations. If A plus B represent the sensory data which in the waking state would lead to X, misirradiation may result in X^1 , or Y or any other parasensory element. Thus the sleeper, hearing his wrist watch at his ear, may dream that he hears the staccato of a brass instrument; the sleeper hearing the staccato may dream he hears his wrist watch.

III. NEURONE MECHANICS IN DEMENTIA PRECOX

The symptomatology and course of dementia precox are those of a falling asleep, a "falling" which is years in duration. In

the preliminary "drowsy" state there is a diminution of dynamia (pep), a progressive loss of interest in everything, dullness and occasional irritability (children especially, are cranky when sleepy). Eventually, corresponding to dream formation, there is the development of hallucinations. These consist mostly of hearing voices. There occur, because of the growing inhibition, misirradiations which result in mis-perceptions of the data of the outer world. Events are given meanings which are wrong and frequently bizarre. During deeper physiological sleep, the dreams consist of disconnected shreds; during shallower—larger wholes—fairly integrated events. During the acute state of Dementia Precox the ideas are fragmentary and the talk is apt to consist of "word-salad"; during the milder state—of more or less integrated systems of delusions (false beliefs). Reversals manifest themselves in various ways: There are reversals of attitudes (from love to hate) towards one's own blood relatives. There are reversals of taste: the patient devours what the normal animal finds repulsive. Now and then the patient becomes negativistic: he does exactly the opposite of what he is asked to do. Landkof demonstrated conditioned reflex reversals in the vaso-motor field in dementia precox.¹⁵ Analogous to the jerky movements of limbs at the point of falling asleep, there occur automatic and semi-automatic activities, usually of the violent sort, which the patient is unable to explain.

Eventually, after years — corresponding to the fading of dreams in deeper sleep — if the disease progresses, there is a fading of the above dramatic features. The patient settles down in a state of complete apathy. He merely vegetates. He is too indifferent to answer questions — even to give his name. This indifference, this *emotional deterioration*, is one of the distinguishing features of the disease.

So sleep-like is this malady that in this likeness to sleep there is a hint of its physiological nature. If the status of sleep is—as many believe—that of synoptic blocking (negativity) which is reversible (causes awakening), then dementia precox is a condition of progressive, morbid synoptic block-

ing which becomes permanent. There is good reason for the assumption that the blocking is at the synapses. It is well known that when an impulse does get over a synapse it proceeds along the neurone with undiminished strength. The fact that no pathological changes have thus far been found in the neurones of such patients is another point of evidence. Of late chemical substances have been found as factors in the inter-neuronic transmission of impulses in the autonomic system—acetylcholin and sympathin. May be there are similar substances at all the synapses. The favorable influence of insulin strongly suggests that we are dealing with metabolic factors.

It is interesting to note that in dementia precox we find what we would expect considering the principle of INDUCTION (that a given effect at one pole induces an opposite effect at the other). Whatever symptom one perceives in dementia precox, one perceives also the opposite thereof, even in the same patient. We find cataleptic yielding versus negativism and resistiveness; mutism versus constant talk; perseverations versus freaky turns of thoughts; dullness, apathy, stupor and immobility versus excitement, noise and violent overactivity. In other words: the effects of the inducing and of the induced.

DIFFERENTIAL DIAGNOSIS. For the general practitioner who usually has to decide between dementia precox and manic-depressive psychosis the following points may be useful. The manic state seems to be a condition of heightened positive index (lowered synaptic resistance) uniformly distributed. Hence the patient is all activity, activity which swirls in undue cheerfulness to the extent of elation. Because of the drop of the (regulating) synaptic resistance the train of thoughts is shunted off at every "switch point" (flight of ideas). In milder forms this is limited to the giving of excessive details (circumstantiality: "beating about the bush"). All answers have an explosive promptness. In the depressive state the opposite holds true: high negative index causing immobility, emotional depression and difficulty in the formation of ideas. The answers are retarded or do not

come at all. While in dementia precox the blocking is in patches (hence the term schizophrenia—splitting up—substituted for dementia precox), in depression the blocking is uniform and usually universal. Hallucinations are rare in manic-depressive. The depressive accuses himself; the precox—others: he is suspicious; believes he is being persecuted, he is being influenced by electricity, telepathy, hypnotism, etc. In manic-depression there is either joy or sadness; in dementia precox—indifference and apathy.

THERAPY. It is important to consider that the earlier insulin treatment is begun the better. Cases treated within the first six months after the onset have a much better prognosis. A fair estimate is that with no treatment about fifteen per cent of all admissions make a partial or nearly complete recovery; and with treatment—about fifteen percent more—about thirty percent in all—do as well.

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Congenital Factors in Urinary Infections

By SAMUEL N. VOSE, M. D., and FRANK P. MORSE, JR., M. D., Boston, Massachusetts

In the course of the complete investigation which should be carried out in every case of persistent or recurrent infection of the urinary tract, in addition to such common conditions as stone, obstruction or tumor, examination not uncommonly reveals structural abnormalities resulting from some aberration in the rather complex embryological process by which the permanent urinary system is developed.

Certain of these conditions, such as congenital obstruction, are of surgical importance in themselves. Others have no interest other than academic. The majority are of significance, however, because they occasion a predisposition to infection and constitute a definite bar to recovery once infection has taken place. The discovery and management of these malformations is one of the most interesting chapters in Urology.

There are several types of these anomalies depending on the point involved and the manner in which the error in development occurs. Fig. 1 (Kelly and Burnham) represents the beginning of the permanent kidney. Starting as an ureteral bud from the lower end of the Wolffian duct, it becomes surrounded by a mass of nephrogenic tissue and grows cephalad until it comes to lie in the lumbar fossa. Ordinarily one bud develops from each Wolffian duct. Failure of a bud to develop on one side or a duplication which may be unilateral or bilateral or the branching of a bud at any point explain the *anomalies of number*. In the course of the progress of the kidney to the position which it occupies in the adult, arrest may occur at any point, in which case we see anomalies of *position* or of *rotation*. The most frequently noted of this type is the pelvic kidney. As the kidneys rise out of the pelvis, they come in close apposition to one another and in that way *fusions* may occur, the most common being the horseshoe kidney in which the lower poles are joined by an isthmus of tissue. Less commonly the upper poles are fused; or the upper

pole of one is joined to the lower pole of its mate, producing the *unilateral fused kidney*. As the kidney progresses upward it obtains its blood supply from successively higher levels. The failure of the temporary blood supply to be properly absorbed may result in *vascular anomalies*. Should the bud develop too low there will result a condition in which the ureter, instead of opening into the bladder, may open into the urethra in the male or the vestibule in the female. Openings into the vagina rarely occur and are difficult to explain as this organ arises from an entirely different embryonic structure.

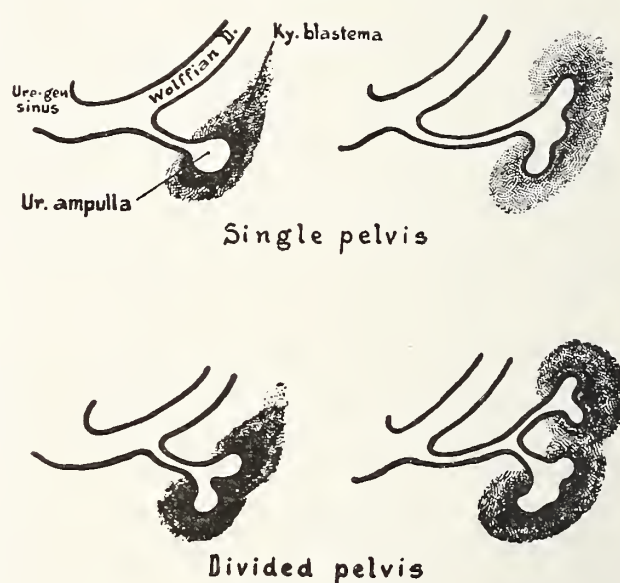
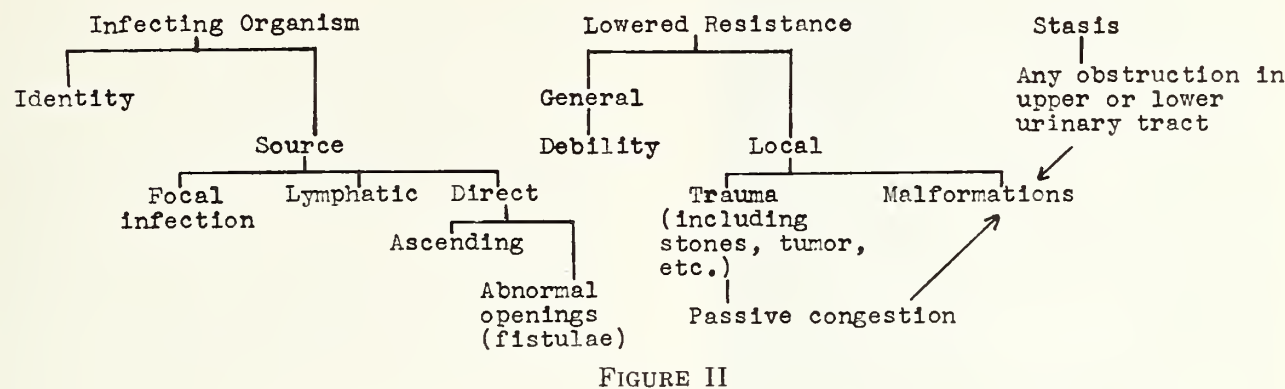


FIGURE I

The position which malformations occupy in the etiology of urinary infections is shown in Fig. II. There is considerable clinical evidence to support the view that malformed tissue, intrinsically, is low resistance tissue. Secondly, an anomalous blood supply may contribute to passive congestion and usually the anomaly is associated with a certain degree of urinary stasis. Thus, malformations concern two of the three major factors in urinary infections.

The following cases illustrate the role of anomalous development in urinary infections:

ETIOLOGY OF URINARY INFECTIONS



CASE REPORTS

I. G. A 68-year-old man entered the hospital complaining of frequency and dysuria of six months' duration. Examination disclosed a round, soft, tender mass in the right lower quadrant. A preliminary film showed a number of small shadows which suggested vesical calculi. (Fig. III.) A tentative diagnosis of diverticulum of the bladder with calculi was made. Cystoscopic examination showed a marked cystitis with a diverticulum not containing any stones and an obstructing prostate. The passage of a catheter up the right ureter met with an obstruction at 20 cm. and 60 cc. of thick pus was aspirated.



FIGURE III

A pyelogram revealed a greatly dilated pelvic kidney which was subsequently removed. Following nephrectomy the patient developed complete urinary retention which was relieved by transurethral resection. The patient was discharged without symptoms.

This condition is rather more common in women than in men, and in many cases the organ may be healthy. In women of the child-bearing age such a kidney constitutes a definite hazard in relation to labor, and unforeseen dystocia has led to the discovery of the ectopic kidney in numerous instances.

II. K. M. A 55-year-old Armenian man was admitted to the hospital with a history of intermittent chills and fever, frequency, dysuria and cloudy urine for the past 15 years. His temperature on admission was 104 and he was having frequent severe chills. Abdominal examination disclosed a palpable mass in the left loin which was tender and moved on respiration. A urine specimen was cloudy and culture yielded *Staphylococcus Aureus*. Cystoscopy disclosed an acute cystitis. Catheterization of the left ureter revealed an obstruction at 15 cm. which was passed with slight manipulation and 25 cc. of cloudy urine were aspirated which also yielded *Staphylococcus Aureus* on culture. There was no obstruction on the right side and the aspirated urine which totaled 15-20 cc. was clear.

Pyelograms (Fig. IV.) disclosed the presence of a horseshoe kidney. Ureteral drainage and urinary antiseptics did not control the infection and operation was undertaken on the left side. A huge infected hydro-nephrosis was found, occupying the upper



FIGURE IV

pelvis of the left half of the horseshoe kidney, and containing several quarts of cloudy urine. This corresponded to the mass found on physical examination, but could not be demonstrated by intravenous or retrograde pyelograms. A left nephrectomy with division of the isthmus was done, with complete relief of symptoms. As a complication this man had diabetes mellitus which required diet and insulin for control.

He has been relatively free from trouble during the past three years, but has recently had an acute infection in the right half of his kidney which was easily controlled by the use of Sulfanilamide.

III. J. C. A 2-year-old boy was admitted to the hospital with a diagnosis of renal rickets which was substantiated by physical examination and laboratory data. Examination showed the patient to have a distended bladder which, on catheterization, held more than 500 cc. of infected urine. His N. P. N. was 120 milligrams per 100 cc. of blood. Cysto-urethroscopy revealed a valve which extended from the verumontanum proximally to the bladder neck, and which terminated in a small lobe very similar to that seen in a "ball valve" type of median lobe prostatic obstruction and also an acute cystitis. A

suprapubic cystotomy was done and the patient drained for three months. His N. P. N. finally dropped to 60-70 where it became stabilized. After this considerable period of drainage the obstructing tissue was resected with the McCarthy electrotome through the suprapubic wound. On catheter drainage the suprapubic sinus healed in three weeks and the patient voided normally with only an ounce of residual urine. His N. P. N. twelve months after operation, remains between 60-70 and the bone changes which were present when first seen are unchanged, although his general condition is much improved, urinary function is normal and the infection is under control.

IV. E. W. A 32-year-old woman whose chief complaint was abdominal pain associated with pyuria and an intermittent vaginal discharge was admitted for examination. The pain had been present for years, but the signs of infection first appeared during pregnancy when she had her appendix removed without relief. This was followed by cholecystectomy. Cystoscopy failed to reveal the true condition. A pyelogram of the right side (Fig. V.) suggested a missing upper calyx and for this reason intravenous urography was done in order to show up an extra pelvis



FIGURE V

should one be present. These failed to show any evidence of kidney tissue above the pelvis already outlined.

Shortly after this her attending physician while obtaining a catheterized specimen of urine noticed a spurt of pus from a point alongside the urethra. He inserted a probe and later a ureter catheter was inserted through this *ectopic ureteral orifice* and a pyelogram was made. This showed a greatly dilated pelvis above the one already demonstrated. A heminephrectomy was done, removing the upper and pyonephrotic part of the kidney together with most of the corresponding ureter, but leaving the normal portion of the kidney. Recovery was uneventful with complete relief of symptoms.

An interesting feature in this case was the absence of the continual leakage associated with normal micturition, which is the classical symptom of this condition. This may be explained on the ground that although the ureter opened into the vestibule it followed the course of the urethra so that some of the fibers of the sphincter may have encompassed it and controlled the flow of the urine.

V. C. L. This is the case of a 53-year-old man who complained of frequency, dysuria, nocturia and pyuria several weeks prior to admission to the hospital. Cystoscopy showed an acute cystitis with a large, smooth mass about the size of a lemon obscuring the left ureteral orifice. On the right side two orifices were seen and the ureters were catheterized. As the cystoscope was withdrawn into the posterior urethra a third ureteral orifice was seen just proximal to the verumontanum on the left side. The efflux from this was cloudy and on catheterization considerable cloudy urine was aspirated. A pyelogram was made (Fig. VI.) which showed this ureter to be greatly dilated and led to the upper pelvis of a completely reduplicated left kidney. The fourth kidney pelvis was shown by intravenous urography, the corresponding ureteral orifice being hidden by the ureterocele. This man was subsequently treated by heminephrectomy and was completely relieved of his symptoms. A checkup



FIGURE VI

cystoscopy showed the mass which was present at the first cystoscopy completely effaced with a normal left ureter remaining.

Many of these conditions occur in children and not infrequently the pyuria which may be the only evidence of disease may appear at a very early age. On account of this fact a delay in investigation sometimes occurs. It should be emphasized that children tolerate cystoscopic manipulations as well as adults and the same rule regarding urinary infections applies.

The cases which have been presented are, of course, but samples of the numerous congenital malformations which may be found in the urinary tract. The absence of characteristic symptoms in the majority of cases emphasizes the need for thorough urological investigation where acute urinary tract infections are slow in going on to complete resolution. This is particularly true today when such potent urinary antiseptics as Sulfathiazole and its associated chemo-therapeutic drugs are in almost universal use, and while they may temporarily sterilize the urinary tract, actually may only mask a serious underlying cause.

Editorial

Regarding Compensation for Local Board Examiners

Requests are being registered that selective service examiners for the local boards should be paid a fair compensation for their work. At the Cleveland session of the American Medical Association, communications were presented protesting the fact that services to this branch of the Selective Service Act were uncompensated. This condition is said to exist because various medical associations agreed on behalf of their members to perform this service free of charge as a patriotic contribution to the defense program. Criticism of this agreement, is based on the fact that heads of the "various medical organizations" did so without taking into consideration the time and financial loss of physicians who do the work. The answer to these communications by the Reference Committee on Military Preparedness, which was adopted by the House of Delegates, was that it would be against the adopted policy of the American Medical Association to recommend that physicians serving as examiners on the local boards be paid, because the Association had *pledged its utmost services* to the government in behalf of the national defense program and to compensate physicians, would make these positions *political in intent and purpose*. The latter statement seems a bit difficult to interpret as to its actual meaning, but what happened was that organized medicine said it would do the work gratuitously and means to hold true to its promise.

Physicians, however, are not alone in being unpaid for services to the Selective Service Boards, yet some satisfaction can be derived from the knowledge that this important branch of the defense program has functioned without hold-ups and the profession is carrying on as it promised to do. The job on a selective service board admittedly is time-consuming and requires care; also, it is very, very unfortunate that some examiners are not taking their duties seriously and doing the work as required. Such methods are manifestly unfair to the government and to the selectees; they also impose extra and need-

less work on other examiners and members of the induction boards, who must rectify the mistakes and complete incompetent and incomplete examination records. It seems childish and beneath the dignity of the profession and is, to prate about our willingness to serve in these times of national need and then whine because the agreement openly made is found burdensome and is "tantamount to a financial contribution of no small size." The profession of medicine does not deal with the commercial commodities of life, and it would seem that a quid-pro-quo attitude must attach itself to retroactive requests that local board examiners be compensated. Why deplore and criticize the methods employed by some, with their loss of much-needed production hours and effort, or duplicate the stupidity of certain bureaus and bureaucrats? The job is worth doing well or it is not worth doing at all, and those who find their duties too burdensome should ask to be relieved. The government asks for an honest and capable examination; mistakes will happen, of course, and the selectee is entitled to no less. Undue and unfair hardships may result unless each individual examiner makes his examination present as actual a picture as possible of the selectee's mental and physical condition. It is unfortunate that criticism can exist, but too many examples warranting the same have occurred.

It may be that the profession could have demanded and obtained compensation for work on the selective boards. It saw fit to do otherwise, and the majority seemingly feel it was the proper course. Despite those who feel that the national situation is not as serious as represented, that danger to this country from physical attack is remote and almost impossible, members of the medical profession pride themselves that they have been trained to observe, think and make deductions of importance. If the obvious lesson abroad is not sufficient, it surely puzzles as to what more could be demanded.

The President's Page

To the Members of the Maine Medical Association:

It is now time to make your plans for attending the Clinical Session of the Maine Medical Association to be held in Portland, October 16th and 17th. Your Scientific Committee in conjunction with the Cumberland County Medical Society has arranged an excellent program. There will be clinics of all descriptions so that whatever your specialty may be you will certainly find something that is interesting to you. Our guest speaker is C. Guy Lane, M. D., of Boston, who will speak on *Occupational Dermatoses*, and as these are so common today the address should be of interest to all.

I also wish to call your attention to the meeting of the New England Post Graduate Assembly at Sanders Theatre, Cambridge, Massachusetts, on October 29th and 30th. This will be the fourth annual meeting of the Assembly. I have had the pleasure of attending the three previous sessions and they have been about the most valuable meetings it has ever been my privilege to be present at. According to the program for the fourth session, which I now have, I feel assured that this meeting will be fully as good as the others were.

I have enjoyed attending several County Society meetings and am very pleased at the interest shown by the members in medical problems.

A committee from the Maine Medical Association is at present working with Mr. Ernest and Dr. Kobes of the State Department of Health and Welfare trying to formulate a fee schedule for State pauper cases. We hope to have this schedule submitted to the Council at our meeting on October 16th. Later it will be submitted to the various County Societies for approval. I should like to have any suggestions you desire to make on this matter sent to me before our Council Meeting.

P. L. B. EBBETT, M. D.,
President, Maine Medical Association.

County News and Notes

Kennebec

A meeting of the Kennebec County Medical Association was held at the Gardiner General Hospital, Gardiner, Maine, Thursday, September 18, 1941.

The Clinical Session at 5.00 P.M., at which the following cases were presented, was presided over by I. E. McLaughlin, M.D., President:

1. Acute Intestinal Obstruction — C. G. Farrell, M.D.
2. Acute Mastoiditis Complicated by Perisinus Abscess—Allan Hurd, M.D.
3. Influenza Complicated by Gangrenous Stomatitis—George Alexander, M.D.
4. An Interesting Case, Fracture of Femur—Frank Bull, M.D.
5. Endarteritis Complicated by Trauma — C. R. McLaughlin, M.D.
6. Cancer of the Breast—A. B. Libby, M.D.
7. Carcinoma of Ovary—I. E. McLaughlin, M.D.

Minutes of the last meeting were read and approved.

The speaker of the evening was C. Wesley Sewall, M.D., Professor of Obstetrics at Boston University School of Medicine, whose subject was *Eclampsia*. This was a very interesting paper, ably presented, and brought out a great deal of interesting discussion.

There were twenty-nine members and guests present.

Respectfully submitted,
FREDERICK R. CARTER, M.D.,
Secretary.

Piscataquis

The annual meeting of the Piscataquis County Medical Association was held at the Mayo Memorial Hospital in Dover-Foxcroft, Thursday, September 18, 1941.

The following officers were elected:

President—F. J. Pritham, M.D., Greenville Junction.

Vice-President—A. M. Carde, M.D., Milo.

Secretary-Treasurer — N. H. Nickerson, M.D., Greenville.

Delegate to the Maine Medical Association 1942 Annual Meeting—H. C. Bundy, M.D., Milo.

Alternate—N. H. Crosby, M.D., Milo.

Board of Censors—M. O. Brown, M.D. (1942); W. E. MacDougal, M.D. (1943); Ruth B. Thomas, M.D. (1944).

Legislative Committee — M. O. Brown, M.D. (1942); E. D. Merrill, M.D. (1943); Guy E. Dore, M.D. (1944).

Frederick T. Hill, M.D., of Waterville was then introduced. Doctor Hill spoke on *Post Graduate Education*, emphasizing the importance of staff meetings at the various hospitals as the best form of post graduate education.

Twelve of our eighteen members were present, also two guests.

N. H. NICKERSON, M.D.,
Secretary.

Coming Meetings

Kennebec County Medical Association

Frederick R. Carter, M.D., Augusta,
Secretary.

November 13, 1941—Sisters' Hospital, Waterville.

December 18, 1941—Augusta State Hospital, Augusta.

Oxford County Medical Society

J. S. Sturtevant, M.D., Dixfield, Secretary.

Annual Meeting — Tuesday, October 21, 1941, at Bethel Inn, Bethel, Maine.

Program:

5.00 P. M. Business Meeting.

6.30 P. M. Banquet.

7.30 P. M. Scientific Meeting. Speaker,

Bentley P. Colcock, M.D.,
Lahey Clinic, Boston.

Subject: *Problems in Gynecology*.

Attention:

Members of the Maine Medical Association attending the Fall Clinical Session at Portland, Thursday and Friday, October 16th and 17th, will please register at the Eastland Hotel. There you will receive a program, any information you may desire relative to the program, and if you are expecting a telephone message leave your name and whereabouts.

The Association's Registration Booth will be open on Thursday from 8.00 A. M. to 7.30 P. M., and on Friday from 8.00 A. M. to 2.30 P. M.

Program

CLINICAL SESSION

of the

MAINE MEDICAL ASSOCIATION

PORTLAND, MAINE

THURSDAY AND FRIDAY

OCTOBER 16TH AND 17TH, 1941

Clinics at the following Hospitals

Maine General Hospital

22 Arsenal Street

Children's Hospital

62 High Street

Maine Eye and Ear Infirmary

79 Bramhall Street

Queen's Hospital

218 State Street

State Street Hospital

68 State Street

* * * * *

THURSDAY EVENING

Regular Meeting of the Cumberland County Medical Society

at the

Eastland Hotel

* * * * *

REGISTRATION

EASTLAND HOTEL

Members will Please Register and receive a Detailed Program

(OVER)

Program

Thursday, October 16, 1941

Morning Session

8.00 A. M. to		
7.30 P. M.	Registration	Eastland Hotel
8.00-10.30 A. M.	Operative Clinics	Maine General Hospital Maine Eye and Ear Infirmary
9.00 A. M.	Surgical, Gynecological and Orthopedic Ward Rounds	Maine General Hospital
10.30-12.00 A. M.	Tumor Clinic	Maine General Hospital
12.30 P. M.	Buffet Lunch	Maine General Hospital

Afternoon Session

	Clinical Conferences	Maine General Hospital
1.45 P. M.	1. Diabetes and Surgery Medical and Surgical Staffs (Subject to be announced)	2. Orthopedic Conference Orthopedic Staff (Subject to be announced)
3.15 P. M.	3. Obstetrical Conference Obstetrical Staff (Subject to be announced)	4. Head Injuries H. Eugene Macdonald, M. D., and Surgical Staff (Subject to be announced)
5.00 P. M.	Clinic for Display of Cases of Interest Maine General Hospital Staff	

Thursday Evening

7.00 P. M.

Regular Meeting of the Cumberland County Medical Society.
(Ladies Invited.)

Dinner (Dress Informal) Eastland Hotel

Lantern Slides—Students, Teachers, Disecting Room, Amphitheatre, etc.

Speaker—Walter E. Tobie, M. D., Portland, Maine.

Subject—An Old-fashioned Medical School.

*Friday, October 17, 1941**Morning Session*

8.00 A. M. to 4.00 P. M.	Registration	Eastland Hotel
8.00-10.30 A. M.	Operative Clinics	Maine General Hospital Maine Eye and Ear Infirmary State Street Hospital Queen's Hospital
9.00 A. M.	Ward Rounds: Medical and Urological Services	Maine General Hospital
10.30 A. M.	Clinic for Display of Cases of Interest Maine Eye and Ear Infirmary Staff	Maine Eye and Ear Infirmary
12.30 P. M.	Buffet Lunch	Maine Eye and Ear Infirmary

Afternoon Session

	Clinical Conferences	Maine General Hospital
1.45 P. M.	1. Medical and Surgical Conference Medical and Surgical Staffs (Subject to be announced)	2. Gynecological Conference Gynecological Staff (Subject to be announced)
3.00 P. M.	3. Dermatology and Syphilis Dermatological Staff (Subject to be announced)	4. Respiratory Infections Drs. T. A. Foster, H. D. Johnson, R. S. Hawkes, and G. O. Cummings
4.15 P. M.	Guest Speaker: C. Guy Lane, M. D., Boston, Massachusetts Subject: "Occupational Dermatoses"	

*Special Notices**Hotel Reservations*

Hotel reservations for the Clinical Session at Portland, October 16th and 17th, should be made direct with the Hotel.

Council

There will be a luncheon meeting of the Council on Thursday, October 16th, at 12.30 P. M., in the Director's Office, Maine General Hospital, Portland.

Committee to Survey Medical and Hospital Care

There will be a meeting of the Committee to survey Medical and Hospital Care on Friday, October 17th, at 9.30 A. M., at the Eastland Hotel, Portland.

S. JUDD BEACH, M. D., Portland,
Chairman.

Tuberculosis Committee

There will be a meeting of the Tuberculosis Committee on Thursday, October 16th, at 10.30 A. M., at the Maine General Hospital, Portland.

EDWARD A. GRECO, M. D., Portland,
Chairman.

To the Ladies

Registration Headquarters will be in the Lobby of the Eastland Hotel. Mrs. George O. Cummings of Portland, is Chairman of the Committee arranging for your entertainment.

On Thursday, October 16th, there will be a Coffee from 12.00 to 2.00. You are invited to attend the Dinner Meeting of the Cumberland County Medical Society to be held in the Eastland Hotel at 7.00 o'clock. Speaker, Walter E. Tobie, M. D. Subject: *An Old-fashioned Medical School.*

Golf will be available to those interested.

Mrs. Cummings or members of her Committee will be at the Eastland Hotel to give you more detailed information.

Notices

Coming Meetings

Three very instructive clinical meetings are scheduled for the near following dates. The fall clinical meeting of the MAINE MEDICAL ASSOCIATION will be held at Portland on October 16th and 17th. The program as printed in the JOURNAL offers a splendid opportunity to again meet with our Portland fellows, who have always presented a program of interest and value.

On October 29th and 30th, the New England Post Graduate Assembly meets in the Sanders Theatre, Harvard University, Cambridge. This assembly is sponsored by the State Medical Societies of New England and has two days of a program that surely must appeal in many respects to the general practitioner. The registration fee is three dollars. A check for that amount to the secretary, Dr. Leroy F. Parkins, 8 The Fenway, Boston, will insure a prompt return of registration credentials.

November 3rd to 7th finds Boston the clinical host of the Clinical Congress of the American College of Surgeons. The extensive program of clinical work, panel discussions, round-table conferences, occupy each day to completeness. The list of speakers for the evening programs contains names well known, and the diversity of interests of the surgeons attending surely must be met since the opportunities are varied and wide in scope. As is usual with the Congress, the exhibit of scientific instruments can well occupy no small part of one's time for a day.

Tumor Clinics

Bangor:	<i>Eastern Maine General Hospital</i> Thursday, 11.00 A. M.-12.00 M. Director, <i>Magnus F. Ridlon, M. D.</i>
Lewiston:	<i>Central Maine General Hospital</i> Tuesday, 10.00 A. M.-12.00 M. Director, <i>E. C. Higgins, M. D.</i> <i>St. Mary's General Hospital</i> Wednesday, 4.00 P. M. Director, <i>R. A. Beliveau, M. D.</i>
Portland:	<i>Maine General Hospital</i> Thursday, 11.00 A. M.-12.00 M. Director, <i>Mortimer Warren, M. D.</i>
Waterville:	<i>Sisters Hospital</i> 1st & 3rd Thursdays, 10.00 A. M. Director, <i>B. O. Goodrich, M. D.</i> <i>Thayer Hospital</i> 2nd & 4th Thursdays, 10.00 A. M. Director, <i>E. H. Risley, M. D.</i>

Announcement

A change in the spelling of the name "Petro-lagar" to "Petrogalar" has been announced by the Petrolagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in the size of the package, price, or formulæ, and that each of the five different types of the product will carry the new spelling, "Petrogalar." The new corporate name is: Petrogalar Laboratories, Inc., and the address remains 8134 McCormick Boulevard, Chicago, Illinois.

Joseph E. Porter—Continued from page 230

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Proceedings

AT THE

EIGHTY-NINTH ANNUAL SESSION

OF THE

Maine Medical Association

FIRST MEETING OF THE HOUSE OF DELEGATES,

JUNE 22, 1941

CONTINUED FROM THE SEPTEMBER ISSUE OF THE JOURNAL, PAGE 223

CHAIRMAN EBBETT: The next order of business is the report of the Delegate to Rhode Island, by Dr. Marcus Torrey of Ellsworth.

DR. MARCUS TORREY: Mr. Chairman and Members of the House of Delegates. The Rhode Island Medical Society held its convention this year on May 28 and 29 in the City of Newport. They broke a fifty-year precedent and moved out of Providence and down to Newport. The convention was really under the auspices of the Newport Medical Society, which acted as a steering committee, and they certainly did a swell job.

The Viking Hotel, which is a small summer hotel in Newport, was the headquarters, and there were as many as thirty members of the State Society who stayed there the entire time. In Rhode Island, they are blessed with short distances and can drive there in the morning and home again at night.

The first day, we attended the usual clinics, which comprised practically all phases of medicine and surgery. In the afternoon, we listened to some very fine scientific papers, the principal paper being delivered by Dr. Murphy of Boston on "The Management of Chronic Leukemias," and that was a very interesting address. It stirred up a real hornet's nest of discussion that waxed furiously well into the afternoon.

That evening, the principal speaker was Dr. Lahey. I always get a kick out of Dr. Lahey. He throws back his coat in this manner [illustrating] and proceeds to speak. I don't remember what the title of his paper was; it was one of those rambling things that went hither and yon. It kept everybody interested. He finally wound up with some real clinical material during the last ten or fifteen minutes of his address.

Things broke up about nine o'clock, and then the unofficial meeting began at the cocktail bar, at which Dr. Charles Gormerly presided. I won't repeat the stories that were told, but they were pretty good.

Thursday morning, the entire session was held at the Newport Naval Hospital. The Commanding Officer at the Hospital had arranged for the members of the Society to do pretty much as they pleased. There was no cut-and-dried program. He did, however, have present the Captain from one of the stations, who brought over an exhibit of safety devices used in the manufacture of torpedoes. Commander Shilling from the New London Submarine Base was up there with one of his crack divers, and they gave an exhibit of diving equipment. This diver, a second-class petty officer, stood there for probably three hours, and in many instances he said the same thing over and over to a million questions that were thrown at him. He was one of the men who dived at the time the Squalus was raised, and so they had plenty of questions for him.

Commander Shilling also held an informal discussion group in one of the corridors of the Hospital, at which there were probably fifty men, completely jamming the corridor, so that nobody could get through. He has worked for twelve years with the Munson Lung, and if there is anything about it that he wasn't acquainted with, he certainly didn't exhibit it that afternoon. He was also present at the time of the Squalus disaster, and used that particular thing to illustrate points he made in discussion of the lung disease and the use of the Munson Lung.

That noon, through the efforts of the Captain, the members of the Rhode Island State Medical Society were given the privilege of going through the old Constellation that is moored at the Naval Training Station there. This would be the last opportunity that anyone would have of seeing the old ship in its original form. They are tearing out the old Officers' Quarters and they are to be rearranged for the Admiral of this Naval District to use as an office.

With Dr. Buffum, who is the new Secretary of the State Society and a very inquisitive man, I

crawled around through the Constellation, looking over the old bars of iron, and, in fact, I don't think there was any place we didn't crawl into and out of.

The luncheon that noon was served at the Officers' Mess in the Hospital, and it was an excellent luncheon, by the way. I don't know how many men were fed, but their ration money must have suffered considerably before they were done.

Thursday afternoon, there was again a scientific session at the Viking Hotel, and the principal speaker of the afternoon was Charles Thompson of Chicago, who talked on "Hypergonadism," primarily, with its usual long line of slides, illustrating various things, and a handful of rather excellent stories to illustrate the points.

That night, the annual banquet was held at the Viking Hotel, and Judge Patterson gave the principal address. This particular man was introduced by the Master of Ceremonies as the Honorable and the only Mayor, because he had been Mayor of Newport for the Lord knows how many years; the only Mayor who had found it necessary to be appointed as Judge, to get rid of being a Mayor. He spoke with a very compelling voice, and he certainly handed the medical profession plenty of bouquets.

There is one other rather interesting thing that I want to tell you about. Thursday morning, in the breakfast room, I ran into Dr. Wells, who was the retiring Secretary, and Dr. Gormerly, who had survived the night before. Dr. Wells is a reserve Captain in the Medical Corps, and he wondered if Dr. Thompson and I wouldn't like to go through Fort Adams. It seems that you have to have all kinds of stamped papers and passports to get in there, if you are civilian. So we borrowed a car—I think it was Dr. O'Connell's, although I am not sure—and went out to Fort Adams. With two or three words, we got in, and we had an opportunity to look around there. It was an extremely interesting hour and a half.

I wish to express my appreciation to the Council for sending me back to Rhode Island. I had an opportunity of meeting a lot of very excellent men who are now my friends. They certainly do give us a wonderful time there. And there is one excellent thing about them down there: they don't ask the delegates to speak; they simply stand up and are recognized, and then they sit down. You keep your face shut all the time.

Thank you very much again for sending me as your Delegate to the Rhode Island meeting. [Applause.]

CHAIRMAN EBBETT: You have heard the report of Dr. Torrey. What shall we do with this report?

DR. JAMES CARSWELL: I move that this report be accepted.

This motion was duly seconded by Dr. Knowlton of Bangor and was carried.

CHAIRMAN EBBETT: We have one more report, and that is from the Vermont meeting; I will ask Dr. Frederick R. Carter of Augusta to give us his report of this meeting.

SECRETARY CARTER: Mr. Chairman and Members of the House of Delegates. I attended the Annual Meeting of the Vermont Medical Society last fall, October 10 and 11, and I want to thank the Association for sending me. It was a very interesting meeting, which I enjoyed very much.

The Scientific Session was held at the Hotel Berwick in Rutland. They had a very interesting program. It was all papers, and they were well worth hearing; they were very instructive, and they were especially well presented.

On Thursday forenoon, there was a public health address by Dr. Charles Carpenter, Associate Professor of Bacteriology of Rochester, New

York. There was also a paper on "Pediatrics" by Dr. Samuel Clausson, Professor of Pediatrics of Rochester, New York. In the afternoon, there was an address by the President, Dr. Charles F. Ball of Rutland, which was followed by a paper of "Medicine" by Dr. Kamm, Professor of Medicine of the University of Rochester, New York, on "The Practical Considerations of the Newer Physiological studies of Diseases." The second paper on Radiology was by Dr. S. L. Warren and was entitled "A Survey of the Newer Aspects of Radiographic Diagnoses and the Relation to the General Practitioner." The third paper was on Genito-Urinary Surgery, by Winfield Scott, Associate Professor of Neurological Surgery at Rochester.

The banquet was held Thursday evening, and that was more of a social occasion and not a scientific program. Following the dinner, there was dancing and entertainment and singing.

Friday afternoon, there was another scientific session, with several papers. The first paper was on Obstetrics and Gynecology, by Dr. Carl Wilson of Rochester; the second paper was on Pediatrics by Dr. William M. Bradford of Rochester, and the third was an address by Dr. Harold Kemp, Dean of the Vermont College of Medicine at Burlington, entitled "Plans for Postgraduate Medical Education in Vermont." It was a very interesting talk. There was also a paper on Surgery by Dr. W. Merle Scott, Associate Professor of Surgery at Rochester, New York, entitled "Some Problems in General Surgery."

The Commercial exhibits were very good, too. They had a very good attendance.

I was very glad to go to Vermont, representing the Maine Medical Association. I met many of my old Professors I had in college, and several of my classmates.

Again I want to thank you for the privilege of attending that meeting. [Applause.]

CHAIRMAN EBBETT: You have heard Dr. Carter's report. What shall we do with it?

DR. BUNDY: I move the acceptance of this report.

This motion was duly seconded by Dr. Cobb and other members present and was carried.

PRESIDENT THOMAS A. FOSTER of Portland: May I have a minute to thank the delegates for attending so faithfully to their assignments. I know that it takes a good deal of time, and some effort on the part of these gentlemen to leave their practices and go to other states to attend these meetings. I do believe, however, that it is a mission that we should appreciate. I think that these reports indicate clearly that our representatives gave a good account of themselves and enjoyed the meetings.

I will be out of office in two days, but before I go out of office, I should like to express my thanks for their attending these meetings, as invited to do so by the Association. [Applause.]

CHAIRMAN EBBETT: We will now have some of the reports of the Standing Committees that weren't published in the JOURNAL. First, there is the report of the Public Relations Committee, by Dr. Warren E. Kershner, Chairman of that Committee.

DR. WARREN E. KERSHNER of Bath: The report of the Public Relations Committee is, I think, very well incorporated in the report of the Chairman of the Council. The question came up, as he indicated, of the basic science law. The second meeting was with the Council at Augusta, at which it was decided with the Council that it was not the proper time.

There have been no other activities, except the basic science suggestion, before the Public Relations Committee.

CHAIRMAN EBBETT: Next, is the report of the Publicity Committee, by Dr. Carter.

SECRETARY CARTER: Mr. Chairman and members of the House of Delegates. The newspapers have been very kind to us this year. They gave us a good write-up for the Fall Session at Bangor, and also an unusual write-up for our sessions here at the Marshall House this year.

All of the publicity that has been released has been under the supervision of the President, Dr. Foster, and myself.

CHAIRMAN EBBETT: We would like to hear, now, from the Cancer Committee, and Dr. Mortimer Warren is Chairman of that Committee.

DR. MORTIMER WARREN of Portland: Mr. Chairman and members of the House of Delegates. I have made a report which was published in the JOURNAL, and I do not know that there is anything special to add to that report, except to say that I think that any successful cancer program will have to be backed by the medical profession in some sort of a fundamental organization. It is necessary, throughout the different county societies and the individual communities to keep track of the progress of it and to serve as local committees, to be familiar with the physicians in their own communities and to assist and advise the central Cancer Committee.

May I say that about the structure of the Cancer Committee, I think it should be a permanent rotating committee, and only one member should leave every year and a new man put in his place. Beyond that, I think I have little to say.

CHAIRMAN EBBETT: I think that it is understood that it is to be a rotating Committee, Dr. Warren, with only one member going off every year, if we let any of them go. I feel that it is valuable to keep this Committee working for longer than that time.

DR. MORTIMER WARREN: I think that these men who serve on this Committee will have considerable work to do if they are to accomplish anything. I think it is very necessary to get familiar with the situation. But I think, too, that you need new blood all the time. You need somebody coming in with new enthusiasm, and at the same time you need the experience of those who have had a chance to observe the situation. That is the way I feel about it.

CHAIRMAN EBBETT: Now, there is also the report of the Special Committee on Tuberculosis by Dr. Edward A. Greco, Chairman of that Committee.

DR. EDWARD A. GRECO of Portland: Mr. Chairman and Members of the House of Delegates. The Tuberculosis Committee was active for the first time in its history, this year. For a number of years, there has been a Committee, on paper, but never has it undertaken to do anything. We met twice, once at Bangor, during the Clinical Session, and once in June, at the Western Maine Sanatorium. We have accomplished a number of things, the details of which we hope will be printed later in the JOURNAL.

I close with two recommendations: That the Chair will see to it, if he wishes to keep this Committee going with about the same personnel, and that the Committee is changed from a Special Committee to a Standing Committee.

CHAIRMAN EBBETT: We will bring that up at the Council meeting later.

We will now have the report of the Committee to Survey Hospitals and Medical Care, of which Dr. S. Judd Beach of Portland is Chairman. Dr. Oram, Secretary of that Committee is here and I am going to call upon him.

DR. J. CALVIN ORAM of South Portland: Dr. Beach asked that I read a short report which he has prepared. This is a new Committee, and we

have been endeavoring to organize it in a workable way. We have written around to several places to get information and data, which we haven't corroborated as yet. We expect to do more in the future. We held an organization meeting at the Augusta House on February 16, 1941. After some discussion, the Committee decided to confine immediate consideration to three projects; an investigation as to the facilities and needs for the medical and hospital care in Maine, a study of methods now in use to extend medical and hospital service, and a survey of the localities in the states now without positions.

An afternoon conference was held with the heads of the State Health and Welfare Work. The officials expressed sympathies with the committee's objectives, and planned to furnish data regarding the improvement of cases.

The Committee undertook to obtain information, particularly with regard to the preparation of plans. The defense requirements make it doubtful if the need for additional physicians in the State can be met with at the present time. The data on other subjects has come in too slowly to warrant any further meetings as yet.

The Committee feels, however, that further study is desirable, and requests a continuance. [Applause.]

CHAIRMAN EBBETT: I think that this Committee has been doing good work, and is one, it seems to me, that we certainly should continue. I don't think that we could better the present Chairmanship.

Now, new business is the next order. Has any one any new business to bring up.

PRESIDENT FOSTER: If nobody has anything to say, then all I've got to say is that tomorrow morning, we are inaugurating the venture as follows. Heretofore, the Morning Conferences have been opened at nine-thirty and everybody selects the conference he wishes to attend and enters that conference. But, we hope, tomorrow morning, to have a gathering here at nine o'clock. I wish the delegates would pass along that word. We will try to have the members in this room at nine o'clock. We have invited a clergyman to invoke the blessings on the meeting, and we have some announcements to make which would help the running of the various Conferences and meetings. So we are going to ask the delegates if they will endeavor to be here themselves at nine o'clock, as we want to start the meeting promptly.

CHAIRMAN EBBETT: Under new business, I would say that the Committee on Finance, which held a meeting in the Eastern Maine General Hospital on October 18, 1940, at Bangor, voted as follows:

"We recommend that the investments of the Maine Medical Association be left as they are; also, that a permanent Committee of three be appointed, one for three years, one for two years and one for one year, and then one annually for three years, to serve with the Treasurer to supervise the investments of the Association."

This is signed by George L. Pratt of Farmington, W. E. Kershner of Bath, and A. W. Plummer of Lisbon Falls.

Now, what shall we do with this? This will change the by-laws, and it is necessary that this be tabled if you want to change them. The motion would have to be laid on the table until tomorrow at our next meeting of the House of Delegates.

DR. FOSTER: I so move.

DR. PRATT: I will second the motion.

CHAIRMAN EBBETT: The motion to table is not debatable so this will be taken up at our next House of Delegates' meeting tomorrow afternoon.

Is there any further new business to come before the meeting at this time?

DR. SAMUEL H. KAGAN of Augusta: I believe that this might be a good opportunity to explain or tell the story to the delegates here of the occasion of our legal representative, who also represented the osteopaths, I believe this last year. I know there has been considerable talk in my neighborhood, but I haven't heard what the end result was.

DR. FOSTER: Mr. Chairman, perhaps I can enlighten Dr. Kagan. Mr. Locke attended the meeting of the Medical Advisory Committee in Portland, and the question was discussed. Mr. Locke introduced the question that his insurance company was employed to defend suits against osteopaths, and he had been asked to have the attorney for the insurance company appear. It was the unanimous opinion of the Committee that it would be a mistake for him to appear for the medical association and the osteopaths. He so understood it, and it was decided that he would tell the insurance company that his first engagement and contract with the Maine Medical Association would henceforth prevent him from serving in the matter of osteopathic suits.

That is where the matter stands, so far as I know. Dr. Carter may have something to add to that.

DR. FREDERICK R. CARTER: Mr. Chairman, I had a letter two days ago from Mr. Scott in Bangor, who represents a casualty insurance company, and he said that he had contacted Mr. Locke in Augusta last week and he assured him that he was not representing the osteopathic association any longer, and was still with this association.

CHAIRMAN EBBETT: Does that answer your question, Dr. Kagan?

DR. SAMUEL H. KAGAN: Yes.

DR. SMALL: As a member of the Aroostook County Medical Society, I have a motion to bring before this House of Delegates, to be discussed, perhaps.

It has been felt by the Society that the incoming President, the President-Elect, has a great many things to do, and these things take up a great deal of his time, other than being present to head the House of Delegates' meetings.

It was felt that perhaps it would be better, if the House of Delegates thought so, to have a Speaker of the House, the same as they do in the American Medical Association. So I am bringing to you a motion that was made and carried by the Aroostook County Medical Society.

It was moved and seconded that the delegates of the Aroostook County Medical Society bring up the question of a speaker for the House of Delegates at the next meeting of the Maine Medical Association, suggesting that the speaker be appointed or elected by the House for a period of three years. This motion was carried.

DR. FOSTER: I move that this matter be referred to the Reference Committee.

DR. PRATT: I will second that motion.

CHAIRMAN EBBETT: Gentlemen, you have heard the motion that this matter be referred to the Reference Committee. Is there any discussion?

If not, all those who are in favor of the motion will please signify by saying "aye."

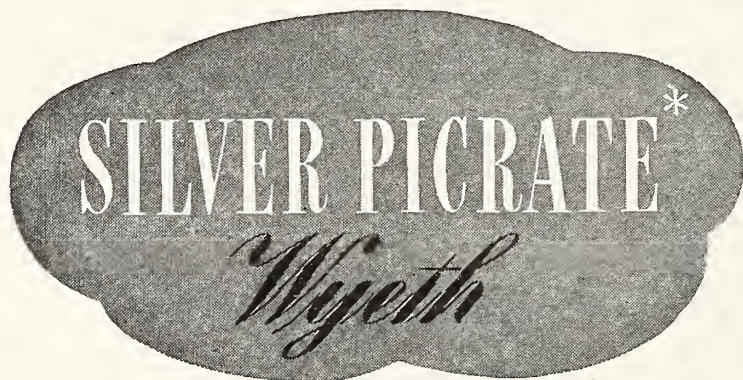
There was a chorus of "ayes" and the motion was carried.

Continued in the November Issue



For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)



A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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*Some Practical Aspects of Mental Hygiene**

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May I assure my listeners that this paper has not been prepared for the specialist in psychiatry! It has been written for the practitioners of medicine and surgery who attend to the daily needs of our sick people. It proposes to answer two questions: first, what use is mental hygiene to them (that is, to you), and second, how will it help you in your daily work?

It is not easy to answer these two questions completely in the time allotted to me this morning. However, I believe I can convince you that there is something to mental hygiene and that you will wish to go into it further. You will come to see that there is nothing mysterious about the subject, although there is something mental about it. As a matter of fact, the general practitioner of the horse-and-buggy days was a pretty good hand at mental hygiene and many a general practitioner of today is an able successor although he may not realize it.

Let us be frank about it. It has been difficult to "sell" mental hygiene as such to the general medical profession. Psychiatrists, its chief salesmen, have slung about strange words in Greek and Latin; some of them have made sex the only motif in life, and this

has exasperated many; others have been baffling by casting an air of mystery about their subject. At any rate, many medical men confess they cannot understand us, although some now say that they do begin to see a glimmer of the truth. The subject matter of psychiatry, it is true, suffers from a serious liability in that it deals so largely with intangible concepts such as delusions and hallucinations, which are difficult to understand unless one has the psychiatrist's close and continuous opportunity to observe and study them. Our field still suffers from the fact that there are various schools of psychiatric thinking which further confound the uninitiated doctor. There are the organicists on the one hand and the psychologically-minded on the other, with the middle-of-the-roader of many shades in between. Moreover, it has not been until the last five or ten years that some of our medical schools have included adequate psychiatric instruction in the training of our doctors and many physicians have entered private practice whose knowledge of psychiatry has not been much more than a long list of Greek and Latin words learned at medical school. I mention all these difficulties to account, at least in

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part, for the average medical man's confusion over our subject matter. I shall try to avoid this confusion and to treat my topic from the point of view of the practitioner of medicine, with no out-of-the-ordinary excursions into the intricacies of terminology or flights into unknown regions.

What, then, in simplest terms, is the mental hygiene point of view in the field of general medicine and surgery? As in other fields, it is this: The human person is both mind and body—at all times with no exception. Your patient is a human being, the body being one aspect and the mind another. Furthermore, the human personality does not exist alone as a discreet individual but lives in close and intimate association with other human beings and in a physical environment. Phrasing this differently and in more orthodox terms, Mental Hygiene looks at Man as a "total individual existing in a total situation."

Let me break down this concept into simpler elements. When studying or treating the patient, the mental hygienist never thinks of the patient alone—he always thinks of him as a member of a family unit which is itself a part of larger social groups. The family is the most intimate of social groups and our patient comes to the consulting room and to the hospital with the influence and effects on his personality of the members of his family. If he is married, his wife and children are active and activating factors; if he is not the head of a household, he is or has been part of a family group, the members of which have constantly influenced him and are still doing so. We think of these interrelationships between the patient and family not only in terms of the present but, what is much more important, in terms of the past from the very moment that the child is born. As a matter of fact, one should go still further back and try to get an estimate of the hereditary potential. We think specifically of the emotional interactions which go on between the patient and members of his family, especially those between himself and his parents.

All this study of the patient as a social being is in addition, of course, to considering the patient as a physical being with organs and tissues. But even here, we no longer

think of organs, tissues, and systems as being independent of one another. The day has gone when we think of any part of the human body or personality as existing independently one from another. We think of the integrated personality and of the integrated physical mechanism represented by the body. This attitude of looking at ourselves as a whole has been strongly emphasized by Cannon and other physiologists in recent days.

At this point you may say to me: You are proposing a complex way of understanding a human being who is, moreover, a sick individual. It is difficult enough for us to think of Man as a physical being. We are apt to consider him, unconsciously it is true, as a very complicated piece of machinery, thinking of him much as a Ford car. (Some may prefer to dignify Man by comparing him to a Rolls Royce instead.) We try to understand him and any disease that he may have through the application of our knowledge of chemistry and physics. We examine his body fluids chemically and microscopically; we expose him to the X-ray; we attach him to the electrocardiogram and other types of machinery. When we get through we have a lot of graphs and figures and out of the mass of these we attempt to make a diagnosis. Now you come along and ask us to add to all this the need of understanding and treating the personality of our patient. This makes our already too complicated job much more difficult.

My answer to this is that if it is really true that man is both body and mind, that he does not exist alone as a discrete individual but as a social being, living in a physical environment, the fact that it is a very difficult and complicated belief does not make it untrue. Despite this increased complexity of the way of looking at our patients, experience has worked out rather simple methods of obtaining the end in mind.

What are they? Before going on to this, may I interpolate here that undoubtedly the psychiatrist, in his role as specialist and in his job of understanding and trying to treat what generally come to him as the more difficult cases, has to employ methods and procedures more tedious, complicated, and difficult to understand and apply than the ones which I shall discuss. I am assuming, too, that the

general practitioner will not be much concerned with the disposition and treatment of the out-and-out psychotic cases as these are largely the province of the psychiatrist and the State hospital.

When one realizes that approximately one-half of the patients seen by the everyday practitioner of medicine are functional mental cases, belonging in the main to the neuroses, one can see how overwhelming a task it would be if therapy were left to psychiatrists alone. Not only are there not enough psychiatrists to treat all these but the long drawn-out treatment often practiced by these specialists is not for the pocketbook of the average citizen.

In the treatment of the common neuroses, it is the opinion of some of our best men in psychiatry that by-and-large the general practitioner can do almost as good a job as the psychiatrist when it is realized that the special treatment techniques of the latter are limited in their general application and cannot be made available to the tremendous number of individuals who require psychotherapy.

If you should ask me what are the fundamental procedures which every doctor might employ and which would help him to do a better job in the diagnosis and treatment of the multiform types of neurotic disorders coming to him in his daily work, many in the form of physical ailments, I would say two things: First, a sympathetic understanding and helpful attitude, and second, a willingness to give plenty of time to these patients in the consulting room or at the bedside. This second procedure would have the history taken by the physician himself rather than by delegating this task to others as is often the practice. This history should not be limited to the usual medical or surgical questions about the individual but should include quite a good deal about his early childhood, his personal life, and his family life. A lot of material would come to the doctor if he took, in the main, what might be called a "listening" attitude in his interviews with his patients. Leading questions, except for those that are absolutely necessary, should be few and so worded as to stimulate the patient to tell about himself, his complaints, and his personal and family life. The history should not be limited to the first visit but should ex-

tend over a period of time and include material that comes spontaneously from the patient.

When these two procedures—a sympathetic attitude and an adequate history—are carried out, treatment naturally follows. This is largely common sense.

It has been found that when a sympathetic attitude is taken toward the patient and he is given plenty of time to tell about himself and his troubles, the physician or surgeon frequently gets a more accurate picture of the patient's complaints and disorder than he does with the usual hurried methods of history taking and interview. In addition, the very process of encouraging the patient to talk is in many cases a very valuable psychotherapeutic measure. The patient feels better as a result and if the condition is a functional one, it helps him many times to continue at his work and to make the necessary adjustments to daily life.

The effectiveness of this so-called "listening" type of interview in which the doctor does very little of the talking and asks very few questions is no longer to be doubted. It is a recognized clinical observation in psychiatry and I know many of our medical confreres and surgeons will testify to the effectiveness of this procedure in their practice. It is interesting to note that a great deal of experimental work done by Elton Mayo and his colleagues in their researches at the Harvard School of Business Administration has demonstrated beyond question that this type of interview is very effective in helping to keep people happy and maintain their emotional balance while on their jobs. Elton Mayo discovered that this type of interview permits the ventilation of a great deal of semi-melancholic fantasy indulged in by a great many industrial workers. This release in itself makes them happier, less complaining of their troubles and of their physical and mental ills, and results, strikingly enough, in increased production.

I know, of course, that the immediate retort of most of the doctors here is that you have not the time, that your practice is now hard-pressed, and that patients will not pay for such extended medical attention. To my mind this is a very real problem and one that cannot be easily dismissed. Our practice as

physicians is really the selling of time and if this time does not bring us adequate recompense, we cannot continue our practice of medicine. On the other hand, the taking of a relatively lengthy history and allowing the patient to talk often makes unnecessary expensive laboratory procedures and hospital stay. It would, therefore, be more economical for the patient in the long run to pay the physician for the methods here suggested than for the ones more commonly practiced. The difficulty, of course, is in convincing the patient of this.

Thus far I have continued my discussion without illustrative or case material but from now on I shall do so. I presume that it is not necessary for me to take the time to prove that impaired bodily function affects behavior, both external and what might be called internal behavior or mental life, and that it is not necessary to demonstrate the effect of mental behavior, of mental action or of emotions and thinking, on bodily functions. However, it would do no harm to spend a few minutes on this point because if the examples to be cited are kept constantly in mind, there can be no question of anyone engaged in the practice of medicine not being convinced of the need of carrying out his techniques in accordance with them.

Psychiatry has definitely shown the positive relation of changes in organic structure to changes in behavior. For example: in the case of the syphilitic psychoses, one finds lesions in the brain due to the spirocheta pallida; in cases of encephalitis lethargica, a nervous disorder frequently following epidemics of influenza, we find in adults chiefly neurological changes and in children character, personality, or behavior changes. These two examples, and there are many others (such as diseases of the endocrines, the most notable of which is exophthalmic goiter), prove the definite relationship between disturbances of organic structure and changes in behavior. I believe that this relationship is accepted by all medical men, but the other relationship—the effect of ideas and emotion on behavior—is not so definitely or widely recognized.

The first World War produced a great deal of clinical material, the so-called “shell-shock” cases, most of which were nothing

more than neurotic conditions similar to the neuroses of civil life; there is little difference between them except in the circumstances surrounding their appearance. These cases showed definitely the influence of ideas and emotions on behavior. These soldiers were torn between a sense of duty and the effects of fear and developed neurotic symptoms which helped them to escape from their situation through illness. Their illness was often expressed, without actual evidences of organic lesions, in paralysis of the limbs, in disorders of the alimentary tract such as vomiting and diarrhea, and in disturbances and palpitation of the heart. Many a case of arrhythmia, effort-syndrome, and angina pectoris resulted from the stress and strain of war, with no evidence of organic disease being found in the heart. Many soldiers developed deafness, lost their voices, became blind. Of course, a good many broke down and became psychotic. These psychotic cases are not considered in the present discussion.

There is one example of the effect of ideas and emotions on behavior which may be somewhat shopworn but, being more related to the practice of medicine itself than to that of psychiatry, it may clinch my argument as to the effect of ideas and emotions on behavior. Some years ago a medical school was conducting an experiment on the clinical effects of a certain preparation of digitalis. They were doing this under the auspices of two hospitals and in each the same types of patients were selected and the same preparation of digitalis was used. In one patient it was noted that instead of the pulse going down as it should, it went up, and the cause for this was not at first apparent. However, it turned out that the patient whose pulse went up had overheard the physician saying that she was receiving digitalis and this patient had been made to understand some years previous that when anyone with heart trouble had to be given digitalis, his case was practically hopeless and his chance for recovery very small. Here we see the effect of fear on a physiological symptom which in this case clouded the effects of a drug whose pharmacology is well understood.

This dropping of an unguarded statement by a physician in attendance on a patient has resulted in innumerable instances of misery

entirely unwarranted. Another example illustrating this is that of a case where a nose and throat man was operating on a young adult patient for the removal of tonsils and adenoids under a local anaesthesia. He made a remark to an assistant that if he cut much more deeply into the gristle, the patient would lose her voice. The next day she did and developed a full-blown case of aphonia which required intensive psychiatric care to relieve it. If I had the time, I could illustrate this type of mental reaction by many more interesting and illuminating examples.

Every practitioner of medicine has probably the almost daily experience of diagnosing and treating gastrointestinal disorders. Experts in this field have estimated that about 50 percent of these are not due to organic disease and that even some cases with organic lesions, such as peptic ulcer, are often complicated by or are complications of a functional nervous disorder.

As a matter of fact, Canadian experience in connection with the present World War has shown that a large proportion of the medical casualties sent back from Great Britain to Canada are suffering from peptic ulcer. We are now observing that when soldiers are exposed to great stresses and strains, an important proportion of them develop organic lesions like peptic ulcer. This is another confirmation of Cushing's dictum before he died that emotional factors play an important role in the causation of this disorder.

We know, moreover, that fear and anxiety states in susceptible individuals are apt to cause disturbances such as vomiting and diarrhea. A very common disorder is colitis, a term which is unfortunate because most cases of this do not show any pathology of the colon but are frequently a functional reaction of that bowel to a disturbed emotional state. If this relationship between emotions and the behavior of the colon is not kept in mind, unfortunate results often occur. Many of these cases do not show any important improvement if treated only by drugs or irrigation. Rest, change of scene, and psychotherapy are frequently helpful. If we think of vomiting as always being due to some organic disturbance of the gastrointestinal tract, we are very apt to overlook cases where vomiting is the common reaction of an in-

dividual to stress and strain or is evidence of unconscious disgust on the part of an individual to some undigested life situation. Acute and chronic diarrhea are also often reactions of an individual under stress and strain.

Our practitioners are aware, too, of the many cases of cardiac disorders where it is difficult to find any pathology which would explain them, even by the electrocardiogram, and which do not clear up unless treated from a mental hygiene point of view. Again, understanding, rest, change of scene sometimes, and psychotherapy are the most effective treatment.

A fair number of neurotic cases when investigated show definite organic lesions, such as infected teeth or tonsils, peptic ulcers, gall stones, adhesions, or retroverted uteri. When many of these lesions are treated or removed, the patient still has his neurosis and his complaints. It is a fine challenge to medical judgment to decide when or when not to treat these conditions either by medical means or by surgery. If we take too dogmatic or fixed an attitude and allow the physical conditions to remain untreated when found in a neurotic, it would lead at times to unfortunate results. It is not infrequent to think of a patient with many physical complaints as suffering from neurasthenia and letting it go at that and some months later discovering that this patient has developed a case of carcinoma or some similar disease. This is most disconcerting to the patient, his family, and the physician, and should be guarded against. Just how to advise my medical confreres to guard against this is most difficult. I should say the best way to avoid this pitfall is in all cases to make as thorough a physical examination as possible. But always base one's final judgment upon a complex knowledge of the patient as a human personality—both mind and body. Often the information that comes from a lengthy history and from interviews with a patient will give the physician a clue to the trouble and guide him in deciding how far he shall go with treatment along physical lines and how far he shall depend upon psychotherapeutic procedures. One should avoid suggesting symptoms to the patient by emphasizing the physical aspect of his complaints; one should not give

the impression that in looking for evidence of physical disease, the physician wants to be sure that the patient does not have some hidden cause of his troubles in the form of some diseased organ or tissue. He should rather take the attitude that the chances are good that nothing will be found, stimulating the courage of the patient and making him feel hopeful of the future. I confess that no simple rule can be given relative to this problem. In my opinion, this is one of the most important challenges to modern medicine, especially for those working in this area between disease and health, which is often so difficult from the point of view of diagnosis.

It has been demonstrated time and time again that the general practitioner, if he is so inclined and is willing to give the time, can do a great deal in the treatment and handling of the hosts of neurotic cases that come to his attention in the many guises of physical illness. Some of these neurotic cases, of course, will not respond; a fair proportion, however, will do so to a limited degree, and a larger number will be ameliorated a great deal and for all practical purposes may be considered cured. When the general practitioner who is interested in his neurotic patient does not get good results, it may be that another physician will have better luck. It has to be borne in mind that a good deal of the treatment-results depend largely upon the personality of the therapist. On the other hand, in many of these cases it is difficult for a competent psychiatrist to get much better results than the interested practitioner. One of the reasons is that some of the special techniques which psychiatry employs, notably psychoanalysis, are not generally available because of expense and qualified analysts are extremely few in number. The personality of the psychiatrist is similarly a definite factor in therapy.

Furthermore, there are a number of neurotics whose neuroses should not be seriously interfered with as probably they provide the best adjustment these individuals can make under their particular life circumstances. For them, superficial supportive therapy which a general practitioner can give is extremely helpful. Palliative relief of symptoms is important here.

So with these facts in mind, our general

practitioners ought not to feel discouraged by the fact that they have a neurotic patient to deal with, an attitude which unfortunately is too common. It should be remembered that sometimes the only way that a patient can manage his life is to find some interested, sympathetic individual, preferably his family physician, who can listen to him when he is in difficulty, who can explain his physical symptoms and other troubles to him, and encourage him in difficult times of stress and strain—in other words, keep him going. Many of these patients can get along fairly satisfactorily, often make notable contributions to the community, and support and bring up their families, just from such supportive therapy. In many of these instances a psychiatrist could not do much more for a patient.

These personal interviews often offer a valuable opportunity to the physician who has the mental hygiene point of view to be of great service to his patient in ways that are not purely medical. The interview often discloses very serious and important family crises, financial troubles, marital difficulties—human problems of all kinds. Often the kindly, thoughtful, and seasoned advice and wisdom of a physician will do wonders. The patient is apt to take such advice and counsel from a physician, particularly the family doctor, in whom he has a great deal of confidence. The doctor may refer some of these cases to social agencies in the community where such exist or to a minister, priest, or rabbi. The opportunities for social service through the avenue of the friendly interview are thus legion.

In many of the common neuroses, the mechanisms are quite near the surface. A sympathetic attitude and a willingness on the part of the physician to give time and to listen will often bring them to the surface. Of course, there is always a danger that some such neurotic patients will take advantage of the physician and overtalk themselves. This can be easily guarded against by limiting interviews to one hour or on some occasions to as little as half an hour. The point is to avoid the opposite extreme, which is more prevalent, of giving no more time to a patient than is absolutely necessary. Clinical experience shows that such interviews frequently spaced

when the patients are in crisis, and less frequently so when they are getting along, will do the trick without the necessity of allowing patients to overtalk themselves. With children the mechanisms are not difficult to find as they are quite on the surface, and excellent results—in fact, the best, can be obtained with them.

You would probably like some examples of cases which physicians encounter in which mental or emotional factors play an important role. These usually come to the doctor with some physical complaint, or complaints, as the presenting problem.

A case which strongly impressed itself upon me is one which I treated in the early days of my medical career in general practice. A middle-aged man of foreign birth came to me complaining of gastric distress and vomiting, of pain in his stomach which was relieved somewhat by eating. He told me that he had seen half a dozen physicians in the city in which I was practicing and had gone to a large metropolitan city nearby to consult others, and that he had been to out-patient clinics in both places. All of them concurred in the diagnosis that he had some form of stomach trouble with definite pathology. He told me that some of them had said he had a scratch on his stomach. In each case a diet was given him. I found to my astonishment that what the patient had done was to eat only those items which all of the diets had agreed that he could eat, which reduced his diet to practically nothing outside of milk. He had a great fear of eating. Apparently most of the physicians he had consulted had unwittingly instilled in him a fear relative to his illness. He felt that something terrible must be wrong with him. He had lost 50 or 60 pounds within a few months and was in poor shape. Now the remarkable thing is that without any special knowledge of psychiatry, my therapy worked. I did not know at that time how or why, but somehow I had the intuition that here was a case of functional gastric disorder made worse by the routine mechanistic handling of the doctors and clinics he had consulted. I had quite a little time on my hands in those days. I took a careful history and allowed the man to talk, seeing him on the average two or three times a week for a month or two. I checked up on

his X-rays and found out what the various laboratory tests were, went over these very carefully with him, and explained that actually there was nothing wrong with his gastrointestinal tract, but that somehow he had gotten frightened, that if he continued in his fright, the action of his fear upon his gastrointestinal tract would be the same as if he had a physical disease such as a gastric ulcer. In other words, I told him he had the choice of believing he had an ulcer or believing that he was merely frightened. In either case the ulcer or the fear would have the same result. I also asked him what two or three foods he liked best to eat and he said salt herring and dark rye bread. I told him to go ahead and eat them, as well as milk and plenty of water. To my surprise he accepted my advice and did eat these to the exclusion of almost everything else for some time. I also gave him some simple stomachic as I felt he was a patient who expected some medicine from his doctor. About six months later his wife came to me and asked me for a medicine that would kill his appetite because from weighing about 150 pounds when I first saw him as a patient, he had become so fleshy that he was weighing about 225.

Another type of case is that of a business man of 40, married, with one child, and over-ambitious. Up to a year or so ago he had been for many years a manager of quite an important electrical business. About a year ago because he could not secure an increase in salary, he went into the same line of business for himself. He had never worked so hard in his life as in this first year of his career as a business man. About three or four weeks ago he suddenly developed a serious attack of pain over his heart. He became frightened, believing he had heart trouble. Luckily he went to a wise and experienced practitioner of medicine who with an electrocardiograph and other examinations found that he had nothing wrong with his heart, that he had worked too hard, was worrying a great deal, not sleeping very well and not getting enough rest. The physician advised a vacation, suggested that he take up a hobby, that he keep regular hours, eat regularly, and do what he could to keep from worrying about business affairs. He is now making an excellent adjustment and no longer has car-

diac symptoms. This man was very fortunate in escaping a diagnosis of even probable cardiac disease which would have remained deeply in his memory for years to come and which all kinds of persuasion might not have completely erased. We see this type of case a great deal and many of you have had the same experience in your clinical work.

Another case is that of a woman who called in her physician because of an acute attack of pain in the left lower quadrant. Her appendix had been removed years ago. She had already been seen by two physicians in a number of these attacks and they both concluded that the pain was due to a spastic colon resulting from unhygienic living. It became known, specifically, that previous to every attack she had always had some family upset, either with her husband or her children. The attack of pain was this woman's way of reacting to her life situation. I might add that it has been proven experimentally through the work of Pavlov, Cannon, and others that unstriated smooth muscle is very sensitive to emotional stimuli such as fear, anger, and being thwarted in one's life situation. The colon is quite a common barometer of such conditions.

Acute and chronic constipation and diarrhea are frequently the results of unhygienic living or poorly adjusted emotional lives, or both. If lengthy interviews and careful histories disclose difficult family life or unfortunate personal situations or attitudes, one can do a great deal more in these cases by prescribing proper hygienic conditions and diet, and by providing the opportunity for the patient to discuss freely his personal problems with the doctor, than by prescribing cathartics which unfortunately in many cases cause the patient to become too dependent upon them. These cases of constipation and diarrhea very frequently clear up under such regimes. Sometimes, however, an extended period of rest or a change of scene is necessary.

The last case I will give is that of a girl of fourteen who has been suffering for a few years from severe attacks of asthma. Her father also suffers acutely from asthma, is a very severe psychoneurotic, and has made life

very unhappy for his daughter. Discussing the girl's problems with her and trying to get her to have a different attitude toward life have made her happier and have cut down the incidence and severity of her attacks.

Dr. Walter C. Alvarez of the Mayo Clinic has written a very good article entitled "What Is Wrong with the Patient Who Feels Tired, Weak and Toxic?"* He has found in his practice that many of the patients coming to him with these feelings present a variety of neurotic conditions, many of them even without any complicating physical lesion. In some of the cases where physical disease was found, clinical evidence was against doing much about it as the patient's neurosis was the more important disability. Dr. Alvarez felt that treatment of the specific lesions by medicine or surgery would not relieve the patient of his symptoms. Patients have come to him with symptoms apparently suggesting colitis, peptic ulcer, gall bladder disease, endocrine disturbances, appendicitis; many thought they had diabetes or syphilis. He has had many cases who have been operated on two, three, four, five, and more times where the major trouble was really a neurosis. Disturbances of the gastrointestinal tract seem to predominate in the cases reported but the range of possible physical complaints and physical disease is great. In many of these cases the diagnosis finally made by Dr. Alvarez has varied from insanity to the simplest of family or personal situations which when ventilated and understood were quite easy to adjust with relief of symptoms. Not all of these cases can be helped, it is true, but a great deal more can be done for them than is usually the case.

In conclusion, I want to point out that I have only mentioned in passing the out-and-out orthodox mental diseases, that is, the psychoses, as these are the almost exclusive concern of the psychiatrist. I have said very little of the very serious psychoneuroses which, to get real and lasting results, are the province of the psychiatrist who is especially trained in their treatment. I have tried in the main to limit my discussion to those conditions which the average general practitioner meets in his daily practice. I hope I

* *New England Journal of Medicine*, Vol. 212, No. 3, pp. 96-104, Jan. 17, 1935.

have indicated to you that more can be done for them than merely labelling the patient as neurotic, also that there is much more to be done than witch-hunting for evidences of physical disease. On the other hand, I do want to warn against one possible impression I may have made in emphasizing the psychological aspects and implications of the problem. A physician should always be thorough in his physical examination. When he is working in this twilight area between health and disease, he has to call upon every bit of medical knowledge and experience; in fact, he may have to utilize all of the medical facil-

ities that are available through consultation and otherwise. On the other hand, in trying to be sure that he has not overlooked any physical disease, he should not forget at the same time to be as thorough in understanding the patient as a whole, and that before making his final diagnosis and determining upon a course of treatment, he should weigh the information which comes from studying both the physical and the psychological. Finally, the physician should try also to be not only a physician but a friend of the patient and of the family.

Harper G. Sichler, M. D., of Lansing, Michigan, says in *The Journal* of the Michigan State Medical Society for April, 1941, that most kidney tumors as well as those of the bladder and testicle are radiosensitive and should have preoperative deep X-ray therapy for the double purpose of reducing their bulk and destroying and devitalizing the more sensitive and malignant cellular elements. This makes the removal of large tumors mechanically easier and lessens the danger of metases resulting from operative trauma. Operation should follow in two or three weeks.

Postoperative radiation is generally advisable. Bladder carcinomata are usually radiosensitive to a moderate degree, and will give a good primary response which will often transform an inoperable growth to an operable one. Tumors of the testicle, especially teratoma testis, are radiosensitive and should always have preoperative X-ray therapy covering the regional gland areas as well as the primary source, followed by simple orchidectomy and postoperative radiation. Carcinoma of the prostate is radioresistant, and X-ray therapy is best reserved for the relief of pain.

Before operation for removal of a carcinoma of the colon, much good can usually be accomplished by a period of preparation to allow for decompression of the bowel and rehabilitation of the patient, states John B. Hartzell, M. D., of Detroit, in *The Journal*

of the Michigan State Medical Society for April, 1941. Rehabilitation is brought about by hydration, feeding, blood transfusions and adequate vitamin therapy. In the presence of distension from varying degrees of obstruction, decompression must be secured before rehabilitation can be accomplished. Depending upon the location of the tumor and the degree of obstruction, this is done in several ways. In a low growth, it is sometimes possible to pass a rectal tube beyond the stenosed area. Colonic irrigations or gentle purging will sometimes remove solid fecal particles above a tumor if the obstruction is not complete. It is imperative that the colon be emptied, and a cecostomy or a colostomy is sometimes necessary.

As an adjunct to the handling of the problem of distension from a partial to a complete large bowel obstruction, we have recently seen decompression accomplished by means of the balloon tip intestinal tube, the tip of which is passed into the lower ileum and serves as an efficient enterostomy. During the past three years, on the surgical service of Detroit Receiving Hospital, this tube has been passed on over 150 cases of organic bowel obstruction. The closer the growth to the cecum, the more rapidly and completely will this tube empty the intestine. The tip of the tube is allowed to remain in the lower ileum during and following operation, so that the bowel remains decompressed during the period when healing is taking place.

The Cesarean Section Habit

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There is normally some danger incident to natural childbirth, but certainly the hazards are much greater whenever labor is terminated by some operative procedure. The interference with normal labor increases the risks of childbirth so much that an honest effort should be made to deliver the patient by the natural process, and artificial means should be employed only when it is essential to the welfare of the mother or the baby.

For the past decade, there has been an alarming increase in the incidence of Cesarean sections. Originally, this operation was devised and utilized to overcome insuperable obstacles to delivery, and thus to conserve maternal and infant life, but this operation has been prostituted for the convenience and possibly even to the financial wellbeing of the physician. It still remains, as it always has been, the most dangerous method of delivery, and is responsible in itself for a large percentage of all maternal deaths. In spite of these facts, the incidence of its performance is steadily increasing, and one wonders when the end of the operative procedure will appear.

It is actually only by considering the problem in a large way that its magnitude can be appreciated. Assuming that there are two and one-quarter million births in the United States annually and that one and one-half per cent of the births are by the abdominal route, it is obvious that 33,750 Cesarean sections are performed each year. Assuming further that the maternal mortality rate is five per cent, a figure which probably represents a fair approximation, it appears that nearly 1,700 mothers die following the operation. This constitutes roughly fifteen per cent of the total annual maternal mortality for the country, and data from special Surveys support this statistical approach.

Cesarean section is unfortunately technically easy and thus appeals to the occasional operator as a way out of his obstetric difficulties. It is not well enough recognized that considerable judgment is required in the

selection of cases and that attention must be paid especially to certain contraindications if the operation is to be made safer. Emphasis should be laid upon the proved fact that, when abdominal delivery is utilized as an emergency procedure, the maternal risk is inevitably increased. The safest time to effect this method of intervention is before the onset of labor, while the hazard increases thereafter directly in proportion to the hours of labor.

The indications originally accepted for the Cesarean section have been broadened by some operators until there is practically no limit, and the so-called indications have become nothing more than excuses. Too many sections are being done for occiput posterior presentations, for breech presentations, for mild cases of bleeding, for delayed labor, for rigid cervixes, for toxemias of pregnancy, and even the desire of the patient to avoid the discomforts of labor. Another growing tendency is the performance of abdominal delivery solely for the purpose of sterilization. Delivery through the natural passages with subsequent abdominal sterilization is much safer and far more logical.

The so-called "fetal" indications for Cesarean section are largely debatable unless it can be shown that there is no prohibitive increase in the maternal risk. For an example, let us take a case of placenta previa. The recent tendency is to recommend abdominal delivery for all patients with this complication, the diagnosis being made without recourse to the vaginal examination, which increases the danger of postpartum infection. It is doubtful that anything approaching an accurate diagnosis can be made under such circumstances, since minor degrees of premature separation of the normally implanted placenta may be indistinguishable from certain types of placenta previa, and can ordinarily be treated successfully by less radical procedures. It is admitted that abdominal delivery may be a child-saving device in certain cases of placenta previa, although there

is no good evidence that the maternal salvage is greater, providing that therapy combating blood loss and shock is carried out before vaginal intervention is practiced. There is undoubtedly some justification for abdominal delivery in selected cases of placenta previa which is not evident in other predominantly fetal indications. For example, in eclampsia, the maternal risk is probably doubled when Cesarean section is performed during the acute episode, and certainly it is only rarely, if ever, that a mother should be subjected to such a hazard. However, these problems involving adequate indications are essentially relative and must be solved according to the judgment and conscience of the physician.

The relative safety of the various types of Cesarean section is now clearer than it has been previously. For a time, the low operation was hailed as the solution of the problem of eliminating the major risks from abdominal delivery, but subsequent experience has indicated the falsity of that contention. When an elective operation is decided upon, the classical procedure is probably preferred, since it is technically simpler and no more dangerous. Moreover, the true cervical operation cannot be done unless there has been sufficient labor to produce an adequate lower uterine segment. On the other hand, it is well established that when Cesarean delivery is decided upon after a "trial of labor," or a "test of labor," the low technic is safer and should be employed.

The Cesarean hysterectomy is probably the safest of all methods of abdominal delivery, since it removes the source of greatest danger, the traumatized uterus. Deaths following Cesarean section, that cannot be explained on the Complicating Condition, are usually due to general peritonitis, the organisms entering the uterus through the cervix and penetrating the uterine wall at the incised and imperfectly healed wound. When the patient who is to be subjected to abdominal delivery is obviously infected, the procedure of choice is the Cesarean hysterectomy, since any other type of operation carries a mortality rate of approximately twenty-five per cent. Various other types of Cesarean section have been developed for dealing particularly with the infected parturient, but have never attained

any considerable popularity because the technic is difficult or the procedure fails to impress the surgeon as logical.

The other outstanding indication appears in patients who have fibroid tumors demanding radical intervention because of obstruction. The myomatous uterus is easily infected, and, moreover, the tumors themselves will probably later demand hysterectomy. The common belief that the removal of the uterus after the child has been extracted adds to the risk of the operation is not supported by available data, providing the surgery is competent. Undoubtedly many patients would be saved each year if the validity of this statement were widely accepted.

Another phase of the problem concerns the care of the woman who has previously had a Cesarean section. The old dictum "once a Cesarean section, always a Cesarean" has been rightly questioned, because undoubtedly many such patients later have delivered without difficulty. However, rupture of the uterus through the site of the old incision is a very real danger and occasionally leads to tragic results. Although the character of the earlier convalescence may give some clue to the strength of the scar, it is impossible by direct examination to confirm the impression thus gained, and consequently every scar must be looked upon with suspicion. If the first operation was performed while the patient was still a primigravida and not in labor, it would seem unwise to subject the scar to the strain of vaginal delivery. On the other hand, if the Cesarean section was done on a parous woman for some incidental complication such as placenta previa, conditions are entirely different and a subsequent delivery from below is much more reasonable and may frequently be conducted safely.

It has already been stressed that Cesarean section is not an efficient child-saving measure. At times the child fails to survive because its chances have been prejudiced by the maternal complication, but, even excluding these cases, the child born by section seems not so well equipped for extra-uterine life as is the child born normally. There is no adequate explanation for this fact, but statis-

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A Community Hospital Prepares for Emergency

OLIVER G. PRATT, Superintendent, Salem Hospital, Salem, Mass.

The hospital or hospitals in any community will be the center of medical activity in case of any disaster, whether epidemic, fire, or from the effects of bombings. All of those connected with hospitals, trustees, doctors, and administrative forces should give, therefore, serious consideration to the problems that might confront their hospital under such circumstances. The following statement is the result of the activity of the Salem Hospital in considering ways and means to fulfil its obligations to the community in case of real emergency and to coöperate with the local Public Safety Committee and the Red Cross Emergency Disaster Committee:

I. TRAINED PERSONNEL—(a) Carefully review the medical staff organization in an effort to make sure that representatives of every specialty will be available even after loss to service of certain men.

(b) Study nursing personnel for ways and means to amplify, giving refresher courses for nurses not now in active duty; train ward helpers and ward secretaries to supplement work of nurses.

(c) Give consideration to hours and wages of all classes of employees in an effort to maintain organization in spite of increased wages in industry.

(d) Train volunteers; secure from Red Cross detailed information as to those holding certificates after having passed Red Cross courses in home hygiene and care of the sick and first aid. Train Red Cross nurses' aides and Gray Ladies in collaboration with Red Cross Chapter. This means close coöperation with the Red Cross, such as providing instructors, meeting halls, equipment, and supplies.

(e) Provide adequate health service for the protection of trained personnel. At the moment, we are giving all our employees routine inoculations against typhoid for their pro-

tection, but it will also be a real safeguard if some emergency should arise.

(f) Educate personnel to the problems of the day to secure their coöperation and interest in plans for tomorrow. Now, above all times, we should take all of the employees into the administration's confidence. We must maintain morale.

(g) Additional trained night watchmen might be indicated.

(h) Secure supply of numbered Red Cross arm bands for employees living out so that they will have no difficulty in being identified and getting through closed traffic to report to their duties at the hospital.

II. EMERGENCY ORGANIZATION — The hospital's employed staff must be organized to function in major emergencies. For example, if an emergency causes twenty casualties and they are all rushed to the hospital at 11 o'clock in the morning, adequate personnel would be available from the wards and by canceling or postponing the operating schedule to release surgeons and surgical nurses. Under certain conditions, it might be wise to call the instructors with the preliminary class from the classroom and assign this group to the wards to release more thoroughly trained nurses. If such an emergency arose at night, other procedures might be indicated, such as calling out the entire day crew. What I am endeavoring to indicate by the above is that the hospital should be specific in its plans. It should have its organization set-up clearly defined, and it should go so far as to have a code call covering the different types of emergencies such as was used in the air raid project recently — that is, a blue signal for an emergency that would bring in up to twenty casualties that would call out certain members of the organization, and a red call that would be for a more sizable emergency that would call everybody. In meeting such

emergencies, we must realize that we cannot approximate private-room conditions that exist in the hospitals in peacetime.

III. PHYSICAL PLANT CONSIDERATION—

(a) Water Supply; secure price for driving wells and tie into the hospital's water main. In most cities, the responsibility for furnishing water rests with the city government.

(b) Give consideration to emergency lighting system; at Salem Hospital, we have an emergency lighting unit operated by illuminating gas which we are likewise connecting up with gasoline and suitable carburetors so that it might be a self-contained unit if gas mains are ruptured. In addition, we are acquiring a small number of portable battery lights.

(c) Fire protection; review fire regulations and give more detailed consideration to portions of building where there may be wooden roofs. Check locations and supply of fire extinguishers in areas that might be hit by incendiary bombs. Place containers with five-pound paper bags of sand in proper locations to amplify fire extinguishers. Clean attics.

(d) Review equipment schedules; secure additional beds. At Salem Hospital we have asked the Ladies' Aid to make a survey of army cots in the homes of members of the Aid Association and to arrange with the Motor Corps for transportation of these cots and to supply to the hospital the name of one person who would be able to correlate all details to deliver these cots in time of need.

(e) Give consideration to steps that need to be taken if blackouts become necessary. This requires consideration of materials to use, training personnel, and a study of the sources of light leaks that might be apparent from the air.

IV. REVIEW OF SUPPLIES — We should avoid hoarding, but we should also be conscious of the fact that in war times certain requirements of hospitals are hard to secure. We must anticipate three months' delivery rather than three days', and we must appreciate that many items will be next to impos-

sible to secure regardless of price. The extent to which some hospitals might wish to go in an effort to purchase in a low market with the hope of saving money is of course up to the individual hospital. For its own proper functioning and to aid in the general preparedness program, the hospitals should have at their fingertips information as to the quantity of canned goods, gauze, sheets, instruments, soap, and so on. If hospitals are not carrying an adequate supply for normal times, they should be more thoroughly conversant with sources of supplies and delivery schedules.

Consideration should of course be given to sources for blood supply. Blood transfusion squads should be formed, and the laboratory should give consideration to blood banks and blood plasma.

It would be wise to save burlap bags that potatoes, fertilizer, etc., come in so that the hospital might have a supply of these if sand bags for protection become necessary in certain places.

V. AMBULANCE SERVICE — If a hospital operates its own ambulance, it should give consideration to the equipment of the ambulance and the personnel who go out in the ambulance. One of the greatest hazards under present war conditions is fire, and equipped kits of supplies should be developed with more importance placed on the care of burns. Even if the hospital does not operate and man the ambulance, it should have chests of sterile supplies, medications, and so on, available, as it might be indicated to use a private automobile to transport an emergency crew to the scene of disaster.

The Transportation Committee of the local Public Safety Committee can supply detailed information on extra vehicles that may be used as ambulances, such as delivery trucks and hearses.

VI. PUBLIC RELATIONS — Just as it is important to inform and educate hospital personnel to maintain morale, so it is important to keep the general public informed if we are to anticipate the support and help of the community. Specifically, the hospital

organization should be playing an important part in the public safety organization. It would be natural for a hospital administrator or a member of the staff to head up the health and social service division of the local committee on Public Safety, and of course it would be wise to have the medical division headed up by a staff doctor; a nurse qualified in organization satisfactory to the hospital management should be a member of the medical committee.

The hospital should similarly collaborate with the local chapter of the American Red Cross so that information will be available as to those members of the community with certificates in Red Cross first aid and home hygiene. It is also possible for a hospital to supply an instructor so that courses for Red Cross Nurses' Aides and Gray Ladies may be carried on. It is also imperative that the hospital organization collaborate and work closely with the Red Cross Emergency Disaster Committee.

It is wise, of course, to interpret all of the above to the community in general. The hospital may do this by newspaper publicity, by addresses before different organizations, and over the radio and by exhibits and demonstrations in prominent places, and particularly at the hospital on National Hospital Day, although certain exhibits in the main rotunda would reach a sizable list of people at any time.

One of the best ways that the community hospital may aid the local Public Safety Committee is by being prepared itself. The hospital is the logical center for health education and for care of the sick and injured. If the hospital is prepared to take on a 30 per cent increased load, if the hospital perspective is properly adjusted, if there is close coöperation and collaboration with all of the public agencies, then the hospital can render the same service in time of great general emergency that it does for the emergency in individual families today.

G. B. Myers, M. D., J. M. Robb, M. D., and M. Clapper, M. D., of Detroit, in *The Journal of the Michigan State Medical Society* for April, 1941, report a case of type III pneumococcus meningitis which recovered following sulfathiazole. A total of 127 grams was given over a period of ten days. Bronchopneumonia developed during sulfathiazole therapy. The course was also complicated by the sudden appearance of renal insufficiency with sulfathiazole retention, stupor, delirium, and epileptiform convulsions.

The role of the psychiatrist in the criminal courts of Michigan is discussed by Ralph M. Patterson, M. D., of Ann Arbor, Michigan, in *The Journal of the Michigan State Medical Society* for April, 1941, with special reference to Acts Nos. 165 and 259 of the Michigan Public Acts of 1939. The former defines and provides for the control of "criminal sexual psychopaths" and the latter for psychiatric examination of indi-

viduals charged with murder. These acts permit a deviation from the traditional punitive approach to crime, and offer the psychiatrist an opportunity to present to the court an analysis of the individual as a whole. If the psychiatrist presents practical and conservative reports to the court, it is hoped that a more intimate coöperation can be established in the fields of law, sociology, psychiatry and penology. The proposed ideal goal is the establishment of a fact finding court that would commit criminals to a treatment commission composed of educator, sociologist, psychiatrist and criminologist. This commission, after an adequate investigation, would determine and supervise the plan of treatment during intramural residence of the criminal and continue this supervision during the subsequent parole period. This scientific approach to the problem of crime would become, eventually, more economical than the present punitive approach, as it is to be expected that recidivism would be curtailed and rehabilitation greatly enhanced.

Editorial

A Central Authority for the Procurement and Assignment of Physicians

The procurement and assignment of physicians for military, civilian and industrial services by a Federal Agency is recommended by the Committee on Medical Preparedness of the American Medical Association. No question can arise that the demands to be made on the medical profession will be many and most important in the interests of National Defense. To perform this task with as little confusion and as much justice as is possible, also what is doubly important, it is necessary that such an agency be organized before the need for its services becomes imperative. It would be of little or no value if it acts merely in an advisory capacity; it must have authority is the opinion of the Committee on Medical Preparedness. Upon such an agency would rest no small duty and responsibility and the proposal to include in its personnel representatives of the civilian profession seems not only advisable but almost mandatory. The number of physicians assigned to any service must depend upon the different conditions obtaining in each state. It would seem, however, that there would result far less disruption of service that is obligatory for civilian and industrial needs and a minimum amount of hardship imposed on men selected for assignments if an intelligent discretion can be exercised.

How the civilian members of the proposed authority are to be selected is not stated but emphasis can be laid on the fact that the personnel in each state is extremely important. Those who are allocated for service in the Army, Navy, Public Health, and other branches will be called upon for no little personal sacrifice. Contacts with their personal practices will entirely cease or be at a minimum in some cases; all their financial commitments and obligations of home and civil life must be met which may result in great personal hardships. At the end of their service they will find it necessary to start

from scratch since a lapse of personal contact with patients for something like two years means a great deal.

The proposal of such an agency is unquestionably serious, it is in fact the regimentation of medicine, but since it is felt that the wartime demands of the Government, if such demands become a fact, would result in or invite a national medical disaster such an authority would prevent Government intervention and control over medicine. Under the arrangements now existing there is grave danger that many communities in all parts of the country will be left without adequate medical care and it is stated as fact that some selective boards have permitted induction of doctors in active practice, internes and medical students as privates. The utter stupidity of such a procedure, if at all prevalent, hardly calls for comment and is no small indictment against the common sense of boards so acting.

The procurement and assignment of physicians for the many and varied services is without question a tremendous task. It has been said that the utilization of the punch-card data on file in the office of the American Medical Association will enable that proposed agency to handle the demands but it might be suggested that data obtained from punch-cards do not always reflect the true picture from the standpoint of the individual physician. If this authoritative agency must come and function a wisely selected medical civilian personnel can with confidence be looked for to employ intelligent judgment in this important task with fairness and equity.

“WHEREAS, The President of the United States has declared that we are in a state of unlimited national emergency, and the Surgeon General of the United States Army requested the American Medical Association in June, 1940, at the Annual Session to aid

in the procurement of the necessary personnel for an army of 1,500,000 men; and

"WHEREAS, The American Medical Association established a Committee on Medical Preparedness, which has now on hand the records of approximately 150,000 physicians as well as a statement as to their training, experience and specialization; and

"WHEREAS, The sudden entrance of the United States into a war might immediately require the services not only of the physicians already called to duty but of a very considerable additional number; and

"WHEREAS, Neither the American Medical Association nor any other civilian agency has the responsibility or the authority for the selection of those physicians who would be necessary for immediate duty and who would be called from civilian practice into service with the military agencies; therefore be it

"Resolved, That the United States government be urged to plan and arrange immediately for the establishment of a central authority, with representatives of the civilian medical profession, to be known as the Procurement and Assignment Agency for physicians for the Army, Navy and Public Health Service and for the civilian and industrial needs of the nation.

"This recommendation is made to avoid or minimize confusion and the inevitable delay which would result from the lack of such an arrangement. It is further recommended by the Committee on Medical Preparedness that if this resolution is approved by the House of Delegates a copy of it be sent to the President of the United States, the Secretary of War, the Secretary of the Navy, the Chairman of the Senate and the House Committee on Military Affairs, the Administrator of the Federal Security Agency, the Surgeons General of the Army, the Navy and the Public Health Service, the Adjutant General of the Army and the Health and Medical Committee.

From the Secretary's Office

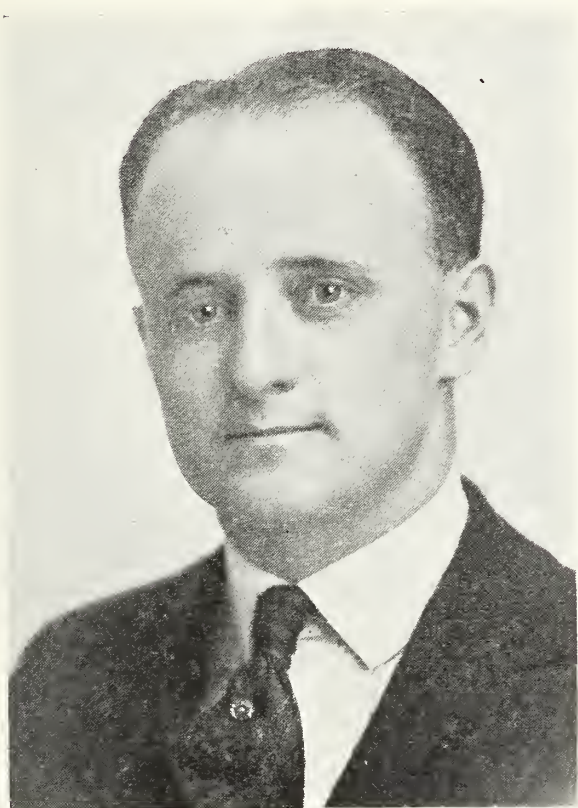
The one hundred and eighty-eight members who attended the Fall Clinical Session at Portland, October 16th and 17th, will, I am sure, join me in commending the Cumberland County Medical Society for an excellent program, ably and well presented. As your Secretary I wish to hereby express my appreciation and thanks to all those instrumental in arranging and carrying out this program.

The Council of the Maine Medical Asso-

ciation in session at Portland, October 16th, in accordance with Chapter VI, Section 8, of the By-Laws, elected C. Harold Jameson, M. D., of Rockland to serve as Councilor for the Third District, comprising Knox, Lincoln and Sagadahoc counties, until the annual meeting in June, 1942, to fill the vacancy left by the death of William A. Ellingwood, M. D. I am pleased to inform you that Doctor Jameson has accepted this appointment.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

Necrologies



***Earl S. Merrill, M. D.,
1895-1941***

Earl S. Merrill, M. D., died at his home in Bangor, on Monday, October 13, 1941, following an illness of several months.

Doctor Merrill was born in Solon, October 12, 1895, the son of the late Doctor and Mrs. Leon S. Merrill. He attended the secondary schools in Solon and Orono and was graduated from Orono High School.

He was graduated from the University of Maine in the class of 1916 with high honors, being a member of Phi Beta Kappa and Phi Kappa Phi honor fraternities. He was a member of Phi Eta Kappa social fraternity. He graduated from Harvard Medical School in 1920. He was a member of Alpha Kappa Kappa medical fraternity. Doctor Merrill served his internship at New Haven General Hospital, New Haven, Connecticut, and remained there two years as assistant resident surgeon.

He came to Bangor in 1923, specializing in urology and urological surgery. He was a member of the surgical staff of the Eastern Maine General Hospital. Vice-President of the Penobscot County

Medical Association. A member of the Maine and American Medical Associations; the American College of Surgeons, the New England Urological Association, and the American Urological Association. Doctor Merrill was a member of the Meadowbrook Golf Club, the Penobscot Valley Country Club, and the Masonic Order in Orono.

Doctor Merrill is survived by his wife, Mary Homan Merrill, and his sister Gladys Helen Merrill of Bangor, an uncle, Albert C. Merrill, and a cousin, Mrs. Myron Jewett of Solon.

Funeral services were held at the home Wednesday, October 15th. Interment was in Mount Hope Cemetery.

***Albert B. Hagerthy, M. D.,
1878-1941***

Doctor Hagerthy was born in Surry, Maine, and spent his early life in Bucksport. Following his graduation from the Medical School of Maine he was an interne at the Eastern Maine General Hospital in Bangor and settled in Ashland in 1903 where he practiced for almost forty years. His death comes as an irreparable loss to his professional colleagues and many friends and patients who mourn the loss of a physician of high attainments and deeply beloved friend. He combined the qualities of a most skillful practitioner with a deep sense of his civic duties. To his patients he was more than a trusted physician: He was a friend to all in time of need and those who went, and they were many, obtained the best that he had and it was good. His success as a practitioner stands on its own record and as a friend and neighbor he will always remain deeply enshrined in the hearts of those who knew and loved this genial man.

He was deeply interested in the affairs of medicine, served his County Society as its president, was a medical examiner for Aroostook County and for many, many years gave of his time and financial support to the Aroostook County Anti-Tuberculosis Association. A most useful life came to an end on October third and he went as he would wish; busy up to the last few days.

County News and Notes

Cumberland

Members of the Maine Medical Association, attending the Fall Clinical Session, and their wives were guests at the 160th meeting of the Cumberland County Medical Society held at the Eastland Hotel, Portland, Thursday evening, October 16, 1941, at 7.00 o'clock.

In the absence of the President, George O. Cummings, M. D., the Vice-President, Samuel G. Sawyer, M. D., of Cornish, presided.

At a brief business meeting Drs. Arthur B. Woodman, Henry G. Hebb, Sidney R. Bramson, and Joseph G. Ham, were elected to membership. Drs. K. Alexander Laughlin and Albert C. Johnson were admitted to membership by transfer from the Iowa State Medical Society, and Dr. Leo J. McDermott from the Massachusetts State Medical Society.

Drs. George O. Tibbetts and Carl M. Robinson reported on the work of the Disaster Relief Committee.

Doctor Sawyer then introduced the following officers of the Maine Medical Association: P. L. B. Ebbett, M. D., of Houlton, President; Carl H. Stevens, M. D., of Belfast, President-elect; Frederick R. Carter, M. D., of Augusta, Secretary-Treasurer; Stephen A. Cobb, M. D., of Sanford, Chairman of the Council; and Frank H. Jackson, M. D., of Houlton, Editor of the JOURNAL, who with W. E. Tobie, M. D., Speaker of the evening, William Holt, M. D., Speaker; E. E. O'Donnell, M. D., Secretary of the Cumberland County Society; M. C. Webber, M. D., President of the Portland Medical Club, and Doctor Sawyer, were seated at the head table.

Doctor Ebbett complimented the Cumberland County Medical Society on the excellence of the program for the Clinical Session. He urged all who could to attend the New England Post-Graduate Assembly being held in Cambridge the latter part of the month.

Doctor Carter read a letter from the Massachusetts Public Health Association inviting the members of the Maine Medical Association to attend a meeting being held in Cambridge, October 30th.

Walter E. Tobie, M. D., presented a paper entitled "An Old-Fashioned Medical School." This very interesting description of Bowdoin Medical School when he was a medical student there in 1897-99, will be published in a later issue of the JOURNAL. Photographs of classrooms and students of those years were shown and details of each given by Doctor Tobie. William Holt, M. D., then showed photographs of classrooms and students of 1919.

180 members and guests were present.

Respectfully submitted,

EUGENE E. O'DONNELL, M. D.,
Secretary.

Dr. Howard T. Karsner, who is professor of Pathology and Director of the Institute of Pathology of Western Reserve University, was a guest of the Tumor Clinic of the Maine General Hospital at Portland on August 14, 1941. Dr. Karsner, a

summer resident of Maine, is known to many physicians in this state. He was not indulged as a guest, but used as a consultant, to our own great advantage.

It is of interest to note the type of disease represented at this particular clinic, for which no previous selection of cases had been made:

Follow-up on 3 patients with carcinoma of cervix, under irradiation treatment.

Follow-up on 2 patients with intra-oral carcinoma, under irradiation treatment.

Follow-up on 2 patients with mixed tumor of salivary gland, post-operative.

Follow-up on 2 patients with carcinoma of face, irradiation treatment.

Follow-up on 1 patient with carcinoma of rectum, post-operative.

Follow-up on 2 patients with carcinoma of breast, post-operative.

Follow-up on 1 patient with lymphosarcoma, irradiation treatment.

Follow-up on 1 patient with carcinoma of kidney, post-operative.

Follow-up on 1 patient with leukemia, irradiation treatment.

Follow-up on 1 patient with gastric ulcer (not continued as tumor clinic patient).

NEW PATIENTS:

1. Question of gumma of subcutaneous tissue of breast, or carcinoma of breast, in a luetic patient.
2. Clinical carcinoma of lip (biopsy before decision as to treatment).
3. Question of keratosis or carcinoma of skin (excision).
4. No evidence of new growth.

In the evening, following dinner at the Portland Country Club, Dr. Karsner presented an informal discussion of Paget's disease of the nipple. After an historical review of this disease and a survey of conflicting opinion as to its nature, he outlined the significant points of his discussion in the form of questions.

1. Is the disease of the nipple precancer or cancer? The acceptance of intraepidermic carcinoma in lesions of the cervix and in Eowen's disease was emphasized as an answer. I interpret Dr. Karsner's opinion to be that Paget's disease of the nipple is another example of intraepidermic cancer, and the term "precancer" an equivocal expression.

2. Is the nipple disease secondary to underlying cancer of the breast? His opinion is that it is reasonably certain that disease of the ducts of the nipple is present before or coincident with the disease of the skin of the nipple, and that the nature of this lesion of the ducts is that of a primary non-invasive intraductal or intraepidermal cancer.

3. Is the mammary cancer which accompanies many cases of Paget's disease when seen, secondary to the skin lesion or intraductal lesion? He believes this is so, and is accounted for by progressive downward segmental involvement of ductal epithelium.

4. Where does tumor of nipple arise? Since genetic development of the surface epithelium of the nipple and of the ducts of the nipple is of identical origin, the tumor may arise in any part of these surfaces.

5. Is there an extra-mammary Paget's disease? Dr. Karsner accepts the evidence to be strongly in favor of extra-mammary Paget's being limited to the axilla, pubis, or perineum, locations where there are apocrine glands, glands which in a sense are somewhat like sex glands.

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, October 7, 1941, at 8:15 P. M. Dr. M. C. Webber presided.

Dr. G. A. Pudor was made an honorary member of the Club.

The paper of the evening was presented by Dr. Léon Babalian, who took for his subject "Border Line Cases of Congenital Syphilis." He referred to three cases which were probably syphilitic despite negative serology and to one case which had stigmata but which was not luetic. The paper was discussed by Dr. C. H. Gordon, Dr. O. R. Johnson, and Dr. Mortimer Warren. Dr. Jack Spencer showed x-rays typical of congenital syphilis.

ALICE WHITTIER, *Secretary*.

Knox

The Knox County Medical Society met at Crescent Beach, Maine, for a dinner meeting, August 12, 1941.

Carl H. Stevens, M. D., President-elect of the Maine Medical Association, spoke concerning the Maine Hospital Association meeting to be held at Lakewood.

John R. Carty, M. D., of the New York Hospital, New York City, spoke in appreciation of the spirit manifested at the clinics held in Rockland.

An arrangement for meetings was agreed upon; the Hospital staff to conduct the clinics and the County Society the meetings afterward.

Paul A. Jones, M. D., of Union, gave a talk on *The Present Status of Shock Treatment*. This was very complete and presented in such a way that everyone could understand the advantages and prognosis in each type described. It was a very fine example of the capabilities of our younger members.

Doctor Sammis of New York City, guest speaker of the evening, talked on *Plastic Surgery*. He showed slides demonstrating operations and explained pitfalls to be avoided. This talk was excellent and thorough, but presented in such a manner that all present could get a clear idea of the technic advised.

A meeting of the Knox County Medical Society was held at Rockland, Maine, October 14, 1941, following a clinic at the Knox County General Hospital.

J. S. Barr, M. D., of Boston, guest speaker, spoke informally on *Low Back Pain*. Many questions were asked and the discussion on the diagnosis and treatment of various conditions which followed was quite general.

The attendance at our County meetings is better and the clinics very well conducted.

A. J. FULLER, M. D.,
Secretary-Treasurer.

Somerset

The annual meeting of the Somerset County Medical Society was held in Skowhegan in September, 1941.

A business meeting was conducted by president Howard Reed of Madison. At this time there was elected a slate of officers, presented by the nominating committee, to serve for the ensuing year.

President: Allan J. Stinchfield of Skowhegan.

Vice-President: Maurice S. Philbrick of Skowhegan.

Secretary-Treasurer: Maurice E. Lord of Skowhegan.

Program Committee: Allan J. Stinchfield, George E. Sullivan, and Henry A. Brann.

Board of Censors: Lester F. Norris, Henry E. Marston, and Harry W. Smith.

Delegate to the Annual Meeting of the Maine Medical Association: Allan J. Stinchfield. Alternate, Franklin P. Ball.

George E. Young of Skowhegan was named as a committee of one to represent us at a meeting of delegates from other counties to find out what is being planned concerning the Farm Security Medical Care proposition.

Dr. Ebbett, President of the Maine Medical Association, was present and talked on his personal experience with the Farm Security Medical Care Plan as tried in Aroostook County.

We were fortunate to have for speakers at this meeting Dr. Edward C. Place, Chief of the South Department of Boston City Hospital and Dr. Joseph T. Smith, who is connected with the Pratt Diagnostic Hospital in Boston.

Dr. Place gave a most interesting and comprehensive talk on *Infectious Diseases*, illustrating with many colored lantern slides the various skin manifestations in these diseases.

Dr. Smith took for his subject, *Some Complications of Pregnancy*, reviewing maternal heart complications, pyelitis, eclampsia and puerperal sepsis.

The attendance at this meeting was good, and at the close of the session a turkey dinner was served at the Skowhegan House.

MAURICE E. LORD,
Secretary.

New Members

Cumberland

Sidney R. Bramson, M. D., South Windham, Maine.

Joseph G. Ham, M. D., Portland, Maine.

Henry F. Hebb, M. D., Bridgton, Maine.

Arthur B. Woodman, M. D., Falmouth Foreside, Maine.

BY TRANSFER

Albert C. Johnson, M. D., Portland, Maine (from the Iowa State Medical Society, Johnson County).

K. Alexander Laughlin, M. D., Portland, Maine (from the Iowa State Medical Society, Johnson County).

Leo J. McDermott, M. D., Portland, Maine (from the Massachusetts State Medical Society, Suffolk County).

[OVER]

Coming Meetings

Kennebec County Medical Association

Frederick R. Carter, M. D., Augusta,
Secretary.

November 13, 1941—Sisters' Hospital, Waterville.

December 18, 1941—Augusta State Hospital, Augusta.

Ordered to Active Duty

Cumberland

Robert B. Love, M. D., Gorham, Maine.

Kennebec

John G. Metzgar, M. D., Augusta, Maine.

Notices

If They Could Talk, Council Seals Would Say:

"When you see one of us on a package of medicine or food, it means first of all that the manufacturer thought enough of the product to be willing to have it and his claims carefully examined by a board of critical, unbiased experts. We're glad to tell you that this product was examined, that the manufacturer was willing to listen to criticisms and suggestions the Council made, that he signified his willingness to restrict his advertising claims to *proved* ones, and that he will keep the Council informed of any intended changes in product or claims. There may be other similar products as good as this one, but when you see us on a package, *you know*. Why guess, or why take someone's self-interested word? If the product is everything the manufacturer claims, why should he hesitate to submit it to the Council, for acceptance? Mead Johnson Products are Council-Accepted.

Tumor Clinics

- Bangor:** Eastern Maine General Hospital
Thursday, 11.00 A. M.-12.00 M.
Director, Magnus F. Ridlon, M. D.
- Lewiston:** Central Maine General Hospital
Tuesday, 10.00 A. M.-12.00 M.
Director, E. C. Higgins, M. D.
- St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, R. A. Beliveau, M. D.
- Portland:** Maine General Hospital
Thursday, 11.00 A. M.-12.00 M.
Director, Mortimer Warren, M. D.
- Waterville:** Sisters Hospital
1st & 3rd Thursdays, 10.00 A. M.
Director, B. O. Goodrich, M. D.
- Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, E. H. Risley, M. D.

For the local Treatment of Acute Anterior Urethritis

(DUE TO NEISSERIA GONORRHEAE)



A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

Proceedings

AT THE

EIGHTY-NINTH ANNUAL SESSION

OF THE

Maine Medical Association

JUNE, 1941

CONTINUED FROM THE OCTOBER ISSUE OF THE JOURNAL, PAGE 250

DR. FORREST B. AMES of Bangor: When the Penobscot County Medical Association voted to remit the dues of its members who entered the government service, there was a sort of provisional motion; it was not provisional as far as the remission of dues was concerned, but it was also with the suggestion that it be brought to the House of Delegates of the State Association, to decide whether or not the State Society, as a group, would wish to take some such action that the dues of the members be remitted if and when they acted in the government service.

The Penobscot County Medical Association did that for its members.

DR. M. S. F. GREENE of Lewiston: I might say that Androscoggin County did that.

DR. FRANKLIN A. FERGUSON: Cumberland County did the same thing.

DR. H. C. KNOWLTON: What happens in the State under those circumstances? Is the Council still supposed to pay them?

CHAIRMAN EBBETT: That is up to the House of Delegates.

DR. H. C. KNOWLTON: I move that the House of Delegates of the State Association officially remit the dues of all men joining the forces of the government while they are in the service.

This motion was duly seconded by Dr. Ferguson and other members present.

CHAIRMAN EBBETT: It is moved and seconded that the dues of all members of the State Association shall be remitted while they are in the government service. Is there any discussion by any of the members.

DR. FOSTER: As a point of information, may I inquire how the names of such members will be carried on the roster of the American Medical Association. I think it is an admirable thing. I think the membership in the County Society, which carried with it a membership in the American Medical Association, should be continued while the men are in the service. If the County dues are remitted, it means that the individual

man doesn't pay his dues to the County Society. If he is carried on the roster of the County Society, it means that the County Society Treasurer must pay that man's dues to the State Society and thence to the American Medical Association.

CHAIRMAN EBBETT: Unless the State Society also remits them, his name would still be carried on the roster.

DR. FOSTER: If you pay his dues to the State Society he is still carried as a member.

DR. H. C. KNOWLTON of Bangor: Suppose they don't.

DR. FOSTER: If his dues are not paid in the State Society, his name is taken from the roll of the American Medical Association, isn't it?

CHAIRMAN EBBETT: We don't pay them. The County Society sends his name in as a member in the service, so that automatically they would be remitted.

DR. FOSTER: Some dues must go to the State Society to keep his name on the roster.

CHAIRMAN EBBETT: I thought they were going to remit the dues.

DR. FOSTER: Who is going to pay the State Society?

DR. H. C. KNOWLTON: The State Treasurer.

DR. FOSTER: I just wanted to know.

DR. FORREST AMES: When that question came up, I happened to be Treasurer of the County Society, and it was my pleasure to send notices for dues, and they were sent to everyone. Before the dead-line of dues must be in, some of these men will be in the service. So I said: "If you will wait a bit, we will take action in the County Society." And the men were very glad to do that. After that, I sent in a check to cover those dues, so there is a little bookkeeping involved there. We will have a rebate in order to make ourselves square. We don't want to misunderstand the thing. It was felt very definitely that we should carry these men. We went so far as to pay their dues. But, if this action goes through today, the money will be refunded. They have already been

members in good standing of the American Medical Association, and would so remain. In another year, we won't pay the State, if they are still in active service. Our \$2.00 County membership we take out of our own books and credit it to the men. Is that the way you understand it?

DR. FOSTER: If it is satisfactory to the Treasurer.

DR. AMES: Exactly.

CHAIRMAN EBBETT: I understood by that, Dr. Ames, that you expected the State Society to refund the dues of those men that you had already paid for the current year.

In Aroostook County, we have one, well, that member paid his dues. The State Society has the money, there, and the County Society got theirs.

Is there any further discussion on this matter? If not, there is a motion before the House, and I think you all heard it, that we remit the dues of the members of the Association while they are in the service.

All those in favor will please say "aye." Those opposed?

There was a chorus of "ayes" and the motion was carried unanimously.

CHAIRMAN EBBETT: Is there any further new business to come before this meeting?

DR. PRATT: I wonder if you will announce that the Committee on Nominations will meet immediately after this meeting in the corner of the room here.

CHAIRMAN EBBETT: I have an announcement to make, too.

[Chairman Ebbett then made the announcement about the various members receiving telephone calls and leaving their names at the desk with the clerk.]

DR. M. A. TORREY of Ellsworth: I want to take this opportunity, on behalf of the Hancock County Medical Society, to again extend to you men and to your colleagues at home an invitation to our Summer Clinical Session, to be held on the 30th day of July at Bar Harbor. We hope to have the complete program for you in the next JOURNAL. Dr. Wakefield is Chairman of the Clinical Committee, and, so far, we know that John Homans is going to be there, and also Dr. Winters of Yale is going to be there.

We have an afternoon program arranged for the ladies, if they want to go sightseeing by boat around the island or by car through the national parks. There will be an opportunity to visit the Jackson Laboratory. Also, we are having dinner at one of the summer hotels, the Malvern, at night, with a short scientific session in the evening.

We would like to have as many as can come down, so we will appreciate it if you will spread the news.

CHAIRMAN EBBETT: In behalf of the Association, I should like to thank Dr. Torrey for this invitation to the Clinical Session at Bar Harbor.

Is there any further business to come up at this session? If not, a motion is in order to adjourn.

DR. H. C. KNOWLTON: I move that we adjourn until tomorrow afternoon at 5:30 P. M.

This motion was duly seconded by Dr. Small and other members present and was carried.

[Whereupon, the meeting was adjourned at 6:15 o'clock in the afternoon.]

SECOND MEETING OF THE HOUSE OF DELEGATES, JUNE 23, 1941

The Second Meeting of the House of Delegates of the Maine Medical Association convened at five-thirty o'clock in the afternoon, at the Marshall House, York Harbor, Maine, on June 23, 1941, with

Dr. P. L. B. Ebbett of Houlton, President-elect of the Maine Medical Association, presiding.

CHAIRMAN EBBETT: The meeting will please come to order, Gentlemen.

The first order of business is the roll call by our Secretary, of the Delegates present.

[Secretary Carter called the roll, and the following Delegates responded:]

Androscoggin County: Merrill S. F. Greene, M. D., Lewiston.

Aroostook County: Frederick L. Gregory, M. D., Caribou.

Cumberland County: Franklin A. Ferguson, M. D., Portland; Frank A. Smith, M. D., Westbrook; Richard S. Hawkes, M. D., Portland.

Franklin County: George L. Pratt, M. D., Farmington.

Kennebec County: Howard F. Hill, M. D., Waterville.

Knox County: James Carswell, Jr., M. D., Camden.

Lincoln-Sagadahoc County: Philip O. Gregory, M. D., Boothbay Harbor.

Oxford County: Henry M. Howard, M. D., Rumford.

Penobscot County: Forrest B. Ames, M. D., Bangor; Henry C. Knowlton, M. D., Bangor; Ernest T. Young, M. D., Millinocket.

Piscataquis County: Harvey C. Bundy, M. D., Milo.

Waldo County: Foster C. Small, M. D., Belfast.

Washington County: Norman E. Cobb, M. D., Calais.

York County: Carl E. Richards, M. D., Alfred.

CHAIRMAN EBBETT: A quorum being present, we will proceed with the regular order of business.

The first order of business is the report of the Nominating Committee. I have here the report, as handed to me by Dr. George L. Pratt, Chairman of the Nominating Committee.

[Dr. Ebbett read the report of the Nominating Committee as published in the July, 1941, issue of the JOURNAL, page 181.]

This report is signed by George L. Pratt, Chairman of the Nominating Committee.

Now, it is customary, I believe, for the House of Delegates to vote that the Secretary cast a ballot for these separate committees, if they meet with your approval.

DR. HENRY C. KNOWLTON of Bangor: I move that the Secretary cast one ballot for the nominees for these various Committees, as brought in by the Nominating Committee.

This motion was duly seconded by Dr. Frank A. Smith of Cumberland, Dr. Carswell and others, and was carried.

CHAIRMAN EBBETT: The Secretary has cast the ballot, and I declare the nominees on those Committees duly elected.

Now, I think we have no more reports of the Committees, but we do have a report from the Reference Committee, on the suggestion that was tabled yesterday.

DR. FORREST B. AMES of Bangor: A resolution was presented to the House of Delegates at our meeting yesterday afternoon from the Aroostook County Medical Society, in which they voted that their delegate be instructed to bring forth to our House of Delegates the question of appointing a Speaker for the House of Delegates of the State Association, with the suggestion that the Speaker be appointed or elected by the House of Delegates for a period of three years. It was moved that this resolution be handed to the Reference Committee and the Reference Committee would consider the question and bring back to this House of Delegates a suggestion for discussion and action. The Reference Committee has considered

this question, and has given its approval to the idea and principle, and therefore, I bring this back to the House for its consideration.

CHAIRMAN EBBETT: You have heard the report of the Reference Committee, which has given its approval to this motion. It was moved and seconded that the delegates of the Aroostook County Medical Association bring up the question of a Speaker for the House of Delegates at the next meeting of the Maine Medical Association, suggesting that the Speaker be elected or appointed for the next three years. That was the motion that was passed to the Reference Committee, and they have reported favorably.

However, I should like to hear this matter discussed on the floor of the House. Since talking with various members, I have heard viewpoints both ways.

The object of the motion, I might say, was that at times it was rather difficult for the President-Elect, perhaps, to carry on the business in a proper business manner, and that, following in the footsteps of the American Medical Association and some of the larger Associations, that we also have a Speaker of the House of Delegates, who would take charge of the business sessions, thinking that perhaps he would be better qualified to do the work and could carry it on more smoothly.

On the other hand, some have ventured the suggestion that it was kind of doing something that we didn't need to do; it was taking the duties of the President-Elect away from him. His main duty during the session is to conduct the meetings of the House of Delegates.

And so, it is a moot question. As to what you shall do with this matter, I should like to hear it discussed before you jump at conclusions; even though the Reference Committee has passed favorably on it, I should like to have you think about it and discuss it.

May we have some discussion on this matter

DR. GEORGE L. PRATT of Farmington: It seems to me, Mr. Chairman, that we have gotten along very well in the past with our present method, and it also seems to me that our Association is not large enough to need such additional officers. We would have to change our by-laws, at least, to make the duty relegated to some other person than the President-Elect, to preside at the meetings of the House of Delegates.

It seems to me that it is entirely needless to do anything of the kind.

CHAIRMAN EBBETT: I should like to hear from some of the other delegates.

DR. FOSTER: I would like to speak in support of Dr. Pratt's point of view. Perhaps the gentlemen from Aroostook felt that the duties of the President-elect were more than he could bear, and that to have a Speaker of the House of Delegates would relieve him of some of the duties which the office has carried.

But, it seems to me the duties of the President-elect are not too tiring. I think that the experience of conducting the meetings of the House of Delegates is a very valuable experience.

Therefore, I would hesitate, if I have a vote, to vote in favor of this proposal.

I can see the value of a continuous presiding officer. I don't think, however, that that is what the Association needs. I think that what the Association needs is the interest of the individual members.

Dr. Ebbett asked the Secretary to call the roll, with the idea in his mind that there might not be a quorum of the House of Delegates. There is a quorum. Some counties haven't any delegates here. I don't think that a Speaker of the House of Delegates is going to make a bit of difference in

that state of mind. I think that having a Speaker of the House of Delegates has but one advantage, and that is, there would be one man who would be continuously in the service as a Speaker of the House of Delegates. I do not believe that is necessary. I am not in favor of the motion.

CHAIRMAN EBBETT: Dr. Hill, you are a Past-President of the Association. I wonder if we can have a word from you on this subject.

DR. FREDERICK T. HILL of Waterville: I should agree, absolutely, with Dr. Foster. There seems to be little advantage in trucking up the Association with needless officers. I think the point he made that the experience of the President-elect in conducting the business of the House of Delegates is an extremely valuable asset to the President the following year, is a very good point to stress. I should feel just the same way that Dr. Foster expressed it. Further, perhaps it would be just as well if we didn't attempt to imitate the A. M. A. too much.

CHAIRMAN EBBETT: Is there any further discussion.

DR. PRATT: I move that this matter of the Speaker for the House of Delegates be laid on the table indefinitely.

This motion was duly seconded by Dr. Hill and was carried.

CHAIRMAN EBBETT: The next order of business is the election of a Councilor from the Third District. Dr. Ellingwood is the present Councilor from that District. His term of office expires this year.

Nominations are now in order for that office.

DR. PHILLIP O. GREGORY of Boothbay Harbor: I would nominate Dr. Ellingwood.

CHAIRMAN EBBETT: Do I hear any further nominations? If there are no further nominations, I declare Dr. Ellingwood elected as Councilor for the Third District.

The next order of business is the election of a Councilor from the Fourth District, comprising Kennebec, Somerset and Waldo Counties. The retiring Councilor is Dr. Carl H. Stevens of Belfast.

DR. FOSTER C. SMALL of Belfast: The delegates met and unanimously recommended to place in nomination the name of John O. Piper of Waterville for Councilor of the Fourth District.

CHAIRMAN EBBETT: We have the name of Dr. John O. Piper of Waterville as Councilor of the Fourth District. Do I hear any further nominations?

If not, I will declare John O. Piper of Waterville elected as Councilor from the Fourth District.

Next, we come to unfinished business. I have here the matter of the Committee on Finance, which was laid on the table yesterday. The Committee on Finance, which held a meeting at the Eastern General Hospital on October 18, 1940, voted as follows:

"We recommend that the investments of the Maine Medical Association be left as they are; also, that a permanent Committee of three be appointed, one for three years, one for two years, and one for one year; then one annually for three years, to serve with the Treasurer, to supervise the investments of the Association."

Now, we deemed it advisable, at the Council meeting last year, that we should have a Finance Committee, and one was appointed. The present Committee consists of George L. Pratt of Farmington, W. E. Kershner of Bath, and A. W. Plummer of Lisbon Falls. Dr. Pratt acted as the Chairman of the Committee. Now, I can't say which one of these men was appointed for three years, two years, and one year.

SECRETARY CARTER: That was a temporary Committee.

CHAIRMAN EBBETT: What is your pleasure as regards this matter? Shall we have a Standing Financial Committee or a Special Financial Committee, to continue in this manner, and how shall this Committee be selected?

DR. HENRY C. KNOWLTON: I move that in line with the recommendation of the Finance Committee, such a Committee be appointed as one of the regular, Standing Committees, and that the first appointments be made by the Council.

DR. GEORGE L. PRATT of Farmington: I will second that motion.

CHAIRMAN EBBETT: It has been moved and seconded that such a Committee be made a Standing Committee, and that the first appointments be made by the Council.

Those who are in favor of the motion will please signify by saying "aye."

There was a chorus of "ayes" and the motion was carried.

CHAIRMAN EBBETT: Now, I think that we have only one thing further to come up in the way of new business, unless some of you delegates have something you want to bring up at this meeting, and that is the place of the next Annual Session, and the time.

It has been customary in the past rather than to jump haphazardly at it, for the Delegates to refer this matter to the Council; that is, you have that authority if you desire it done that way. The place may be chosen at a later meeting, after we have had invitations from various places. It has been found in the past that after we have chosen a place and found out what accommodations they would give us, and if we said right then and there that we would go to a certain place, just as like as not they would jump the rates on us, and certainly we don't want that to happen.

It is just as well to let them bid for us and offer what inducements they have, and that could be decided at a Council Meeting, if that is your wish.

DR. FORREST B. AMES: I move that the Council be empowered to choose our next meeting place, and also the time of the meeting.

This motion was duly seconded by Dr. Howard and other members present and was carried.

DR. M. S. F. GREENE of Lewiston: Is there to be any further action regarding the next Clinical Session?

CHAIRMAN EBBETT: You can discuss that now if you wish to do so, Dr. Greene. I was told that the Council deemed it advisable to hold a Clinical Session. I was also told that Portland, through one of its members, was going to extend an invitation to meet with them. Now, I don't know whether that is correct or not.

DR. THOMAS A. FOSTER of Portland: Mr. Chairman, I have been authorized by the Delegates from Cumberland County, and particularly by Dr. Blaisdell, who was here yesterday, to invite the Association, if it wishes to have a Clinical Session, to come to Portland next Autumn for the Clinical Session.

DR. GREENE: I would like to move that this invitation from the Portland and Cumberland County group be accepted.

This motion was duly seconded by several of the members present and was carried.

CHAIRMAN EBBETT: I may say that the time of this Fall Clinical Session will be left up to the Scientific Committee and the Local Committee in Portland, so that a time agreeable to these Committees will be the acceptable time.

Is there any further business to come before this meeting of the House of Delegates?

If not, a motion to adjourn is in order.

DR. FRANKLIN A. FERGUSON of Portland: I move that we adjourn.

This motion was duly seconded by several of the members present and was carried.

[Whereupon, the Second Meeting of the House of Delegates was adjourned at 6:10 o'clock in the afternoon.]

ELECTION OF THE PRESIDENT-ELECT

The meeting convened on Monday, June 23, 1941, immediately following the Scientific Session, with Dr. Thomas A. Foster, President of the Maine Medical Association, presiding.

PRESIDENT FOSTER: The next item is the election of the President-Elect. The Chair is ready to entertain nominations.

DR. FOSTER C. SMALL of Belfast: Mr. President, we have arrived at the time when we are about to bestow upon one of our members the highest honor in this Association. I have been particularly interested in reading over the history of our organization since its inception, and in that you will find that the devotion and the capabilities of the men who have led this organization through the period of years show me that they have been men of untiring and unceasing efforts to promote good-will and better conditions for all of us, as we come here.

Many of these good men have gone on; many of them are Past-Presidents, who are now living. To be sure, they all made their mistakes, and who hasn't, but, at the same time, we are of a democratic make-up and certainly our discussions are open and there is nothing dictatorial about them.

Those men have made it possible for us to come here today and listen to a program that has been presented, such as many others that have been presented in the past.

At this particular time, when the world is in chaos and we are confronted by problems and God only knows what the future will bring forth, we are certainly facing a definite crisis. We still need men of that same calibre, men who have proven their ability and men who have sacrificed and men who are devoted to the principles of medicine.

It is certain that whatever the future has in store for us, under proper leadership we will meet that challenge one hundred per cent.

The man whom I am about to place in nomination today as President-elect is a man with whom I have practiced, close by my side, for the past twenty-nine years, a man who is a graduate of Bowdoin Medical School; he is a member of the American College of Surgeons; he is highly respected in the community in which I live, both in the community and in professional life; he is a man of proven ability. Certainly, he has been active in this organization for the past twenty-nine years, and more so in the past several years.

I feel that this Association will be safe under his guidance and leadership.

Therefore, on behalf of the membership of the Waldo County Medical Society, and myself, I place the name of Carl H. Stevens of Belfast in nomination for President-Elect of the Maine Medical Association. [Applause.]

PRESIDENT FOSTER: I recognize Dr. Bundy of Milo at this time.

DR. HARVEY BUNDY of Milo: I wish to second the nomination of Dr. Carl H. Stevens of Belfast as President-Elect of this Association.

This motion was further seconded by Dr. Hill and other members present.

PRESIDENT FOSTER: Do I hear any further nominations?

Continued on page XIII

Proceedings—Continued from page 274

DR. KERSHNER of Bath: I move that nominations cease, and that the Secretary cast the unanimous ballot of this organization for Dr. Carl Stevens of Belfast as President-Elect of this Association.

This motion was duly seconded by Dr. Holt of Portland, Dr. Ebbett and other members present.

PRESIDENT FOSTER: All those in favor of this motion will please signify by raising your right hand. I declare it a unanimous vote. The Secretary has cast the ballot for Dr. Carl H. Stevens of Belfast, a member of the Waldo County Medical Society, and I declare him duly elected as President-Elect of the Maine Medical Association.

[The audience rose, and there was prolonged applause.]

PRESIDENT-ELECT STEVENS: President Foster, Members of the Association. Dr. Small has told you that he has put up with me for the last twenty-nine years, and I hope that you will be able to do so for one year while I am in this Honorable Office to which you have elected me.

I want to take this opportunity to thank you, and I assure you of my continued effort and my interest in this Association. [Applause.]

PRESIDENT FOSTER: Now, Gentlemen, I wish to make some announcements before you leave. [Announcements were then made by President Foster.]

Is there any further business to come before this meeting? If not, a motion is in order to adjourn.

DR. HILL of Waterville: I move that we adjourn.

This motion was duly seconded and was carried.

[Whereupon, the Monday Afternoon Session of the Maine Medical Association was adjourned at five o'clock.]

THE END

K. Alexander Laughlin—Continued from page 261

tical evidence makes the conclusion inescapable.

In conclusion, we may say that Cesarean section carries a considerable mortality even in selected cases, and when employed as an emergency procedure, the risk is prohibitive. The fetal and neonatal death rates are appalling when it is considered that the operation is frequently chosen with the belief that it will conserve child life. Better results may be expected only when the indications and contraindications for the operation are better recognized and it is understood that Cesarean section is not a safe emergency procedure.

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The Journal of the Maine Medical Association

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*Symposium on Gall Bladder Disease**

Some Surgical Aspects

By JAMES M. PARKER, M. D., Portland, Maine

From the point of view of the indications for surgery, gallbladder disease may be divided into three groups of cases, chronic cholecystitis with demonstrable stones, cholecystitis without demonstrable stones and acute cholecystitis which incidentally is almost invariably associated with cholelithiasis.

That chronic cholecystitis with stones is primarily a surgical problem is rapidly becoming axiomatic for a number of reasons. Of first importance is the concomitant existence of a low grade slowly progressive hepatitis with its inevitable inroad on liver function reserve. The longer the duration of the disease the more marked the encroachment on liver function and the poorer the operative risk.^{13, 16} Second, accepting the self-evident hypothesis that all gallstones begin as minute particles and grow by accretion, any patient with cholelithiasis presents a potential problem of common duct stone and an attendant increase in surgical risk. Third, as every surgeon has seen repeatedly demonstrated, the most lethal, rapidly progressive cases of acute gangrenous cholecystitis are characterized by the operative finding of a stone impacted in the cystic duct of ampulla of the gallbladder.⁶ Fourth, acute pancreatitis sometimes is a con-

comitant of gallbladder disease.¹¹ Is it not logical to recommend the prophylaxis of operation for stones on a good risk patient early in the course of the disease?

Chronic cholecystitis without demonstrable stones presents a problem that is by no means clear cut.² The stoneless gallbladder, excluding cholesterosis, is a discouraging operative finding to any surgeon. Such a patient frequently presents symptoms of mild to moderate dyspepsia, intolerance to cooked fats and poor dye concentration and diminished gallbladder emptying by Graham-Cole test. If cholecystectomy is performed, no stones are found and the pathologist reports slight chronic cholecystitis, the patient all too often continues to have digestive complaints.

In view of the difficulty of differentiating clinically between chronic gallbladder disease and peptic ulcer in a small percentage of these cases and recognizing that peptic ulcer can produce in certain instances definite changes in the Graham-Cole test, the surgeon may in certain instances wisely take recourse to G. I. series. When the picture remains obscure duodenal drainage has some tangible value.¹⁷

A limited personal experience has led me

* Presented before the Portland Medical Club, February, 1941.

to the belief that positive finding of cholestrin and calcium bilirubin crystals in the B bile specimen are reasonably reliable justifications for surgical exploration.

Should clinical study leave us with only slight changes in the Graham test and a poor history of cholelithiasis we would doubtless improve our post-cholecystectomy results by recommending medical supervision rather than surgery.⁵ According to recent reports, a regime of frequent feedings of uncooked fats combined with bile salts and antispasmodics is of distinct value in this type of case.

Acute cholecystitis is an indication for surgery but brings up a number of interesting points in diagnosis and treatment. Examination of a group of clinical records of cholecystectomy will usually reveal several cases that present a short duration history of right upper quadrant pain with anorexia and fever, show localized right upper quadrant tenderness and spasm, mild fever and definite leukocytosis. There is no characteristic past history of gallbladder attacks and the patient's condition rapidly improves in 3 to 4 days of conservative treatment. However, the Graham-Cole test shows diminished concentration without evidence of stones and with the tangible findings is thought to be adequate indication for exploration. The operative findings may well be completely negative or in fact show a small acute duodenal ulcer. Conservatism with more deliberate study of these initial mild acute attacks would save the patient surgery and ourselves embarrassment.

The typical case of acute cholecystitis with a definite past history of cholelithiasis seldom presents a diagnostic problem provided it is remembered that tenderness in the epigastrium and left hypochondrium is suggestive of acute pancreatitis. This condition demonstrable by elevation of urine diastase or blood amylase is a definite indication against immediate surgery, as shown by recent reports of expectant treatment and deferred surgery in acute pancreatitis with an approximate halving of mortality.¹¹

The old discussion of early versus delayed surgery in acute cholecystitis still goes on. Clute⁶ and other proponents^{3, 9, 13} of early surgery argue that the commonly observed severe type is an obstructive, strangulating

pathological picture, the direct result of an impacted stone and as such can not logically be expected to improve with conservatism. The advocates of delay believe that the acute gallbladder more often subsides than perforates and if perforated seldom causes a generalized peritonitis. Surgery, they say, in the presence of marked inflammatory changes is difficult and hazardous.

It is obviously impossible to be guided by a blanket policy. However, it is frequently true that cholecystectomy carried out within 48 hours of onset of an acute attack in a good risk patient is not fraught with prohibitive hazard.⁶ In the presence of diabetes mellitus early surgery is definitely indicated.

The differential problem of obstructive versus intrahepatic jaundice has obviously considerable surgical significance. The not uncommon occurrence of hepatitis with right upper quadrant pain, jaundice and acholic stools and the occasional existence of common duct stone without characteristic pain complicates the problem. Except for plain films to demonstrate radio-opaque biliary calculi, X-ray of the biliary tract is of no value in these cases, as diminished secretory function of the liver in jaundice will almost always result in no filling of the gallbladder by Graham-Cole test. If calculi are demonstrated this naturally constitutes strong presumptive evidence. The determination of urobilinogen concentration in the urine by serial dilution against a normal control is an important aid. It is normally present in the urine in 1 to 8 dilution diminished to absent in the common duct obstruction and definitely increased often to as much as 1 to 264 in hepatitis. Daily comparison of this test with appearance of the stools and icteric index can shed definite light on a difficult problem of this sort. There is a further clinical test that is seldom used. It was impressed upon me by the recovery of over 400 bile pigment stones from the stools of a male patient with severe jaundice without pain.

The case of intense unremitting surgical jaundice has been in the past considered urgent because of the rapidly increasing hemorrhagic tendency. Having now a specific in the form of vitamin K and bile salts the surgeon can study this type of case with a view to improving the surgical risk,¹² recognizing

still the presence of severe and repeated chills and widely swinging temperature as an indication of early surgical drainage of the biliary tract. The hippuric acid excretion test of Quick¹ is of distinct value in the study of liver reserve.¹⁴ As Franklin White¹⁸ of the Boston City Hospital has repeatedly shown, liver function as demonstrated by this test can be markedly improved by intelligent supportive treatment even in the presence of intense jaundice. Liver damage rapidly leads to diminished plasma proteins and a normal level of plasma proteins is important in surgical repair of tissues.¹⁶ Whole blood or plasma transfusions are of value. As to dietary treatment Ravdin and associates after extensive animal experimentation have shown that optimal repair of the damaged liver occurs on a regime consisting of 25% protein, carbohydrates and in irreducible minimum of fats.¹⁶ The emphasis of glucose intake alone is not enough. Evaluation of liver reserve in all cases of severe and long standing biliary tract disease whether jaundiced or not and treatment specifically directed at improvement of liver function should show definite dividends in an even lower surgical mortality.

In gallbladder surgery the question is constantly coming up—what are the indications for common duct exploration? Because there is undoubtedly a slight increase in the post-operative morbidity and mortality of common duct exploration over that of simple cholecystectomy, these indications should be definite.⁷ Of importance as presumptive evidence are data to be obtained only from the patient's history: 1. Episodes of jaundice or acholic stools. 2. Accompaniment of attacks of colic by chills. 3. Repeated attacks of biliary colic in quick succession. As a fourth indication Arthur Allen¹⁵ adds continuous violent vomiting associated with gallbladder attacks. The first indication is self-explanatory. The occurrence of chills is considered important as an indication of cholangitis arising from common duct stone. Repeated attacks of colic in quick succession are more common with common duct stone than with simple cholelithiasis. Continuous vomiting is believed by Dr. Allen to be a manifestation of duodenal spasm secondary to common duct irritation.

The positive indications are first, clinical icterus or acholic stools as observed by the physician. Second, previous cholecystectomy or cholecystostomy, the first obviously incriminating the common duct. Cholecystostomy indicates either a non-functioning gallbladder or the recurrence of stones in a previously drained gallbladder and hence probably coincidentally in the common duct.

Of the greatest significance however are the findings at exploration.^{7, 15} A dilated common duct, palpable thickening or induration in the head of the pancreas, a scarred contracted gallbladder or a gallbladder containing small stones of the bile pigment variety, any one of these findings make it important to rule out common duct stone. Admitting that at least some of us have had the disheartening experience of missing common duct stones after careful exploration of the duct it is quite apparent that stones cannot be ruled out by simple palpation.

In an occasional instance after thorough exploration of the duct it will be found impossible to pass a probe through the ampulla of Vater into the duodenum. There is undoubtedly much justice in the recommendation of several outstanding biliary surgeons^{7, 15} that there is less hazard to transduodenal exploration of the ampulla of Vater than in attempting to open a passage or dislodge a stone by blind probing through the common duct incision.

Dilatation of the ampulla with graded Bake's dilators to permit the passage of common duct detritus has been advocated by Allen and Wallace.¹⁹ More recently Zollinger¹⁰ has shown that dilatation beyond anatomical size, i. e. about 7 mm, results in severe reflex spasm and obstruction.

In the post-operative care of common duct cases normal intra-duodenal drainage may be encouraged by incorporating a Y tube with an open end to eliminate siphonage and in opposing external drainage by 6 to 8 centimeters of elevation of the drainage tube.⁴ Before removal of the common duct tube a complete visualization of the biliary tree can be obtained by X-ray after injection of diodrast through the tube. If there appears to be common duct residue, there is a distinct physiological rationale to trial of a regime advocated by Best⁸ to encourage relaxation of the

sphincter Oddi, increased biliary secretory pressure, and increased bile flow. This consists of a three-day course. Bile salts by mouth T I D, irrigation of T tube with warm saline B I D. First day nitroglycerine gr. 1/100 T I D. Epsom salts drams 2 B I D. Second day Atropin gr. 1/150 T I D. Olive oil 2 drams B I D. Third day same as first. Several cases reported by him have been relieved of residual stones by this regime.

The problem of the common duct in gallbladder surgery is far from standardized. Certain clinics⁷ present an ever-increasing percentage of common duct explorations, but we must recognize that these clinics in certain instances draw a large quota of surgical problems involving the biliary tract. Thus statistical reports cannot fairly be compared with the experience of the surgeon dealing with the average cross section of gallbladder and biliary tract surgery as it occurs in general practice. In the last analysis the individual's surgical conscience is more to be heeded than statistics. In appendicitis we would far rather remove a normal one than miss a diseased one.

Common duct exploration can by the same defensible logic be put on the same reasonable basis.

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Liver Function Tests

By JOSEPH E. PORTER, M. D., Portland, Maine

There are at present many tests for liver function, all of which are not practical. Some of these tests are of value in determining whether there is disease present, but do not measure liver function. I will briefly describe some of the common tests and where indicated.

1. Bromsulphalein Test: Measures the ability of the liver to remove Bromsulphalein from the blood stream and excrete it in the bile. Obstruction of the bile ducts without any parenchymatous disease may give abnormal results, due to interference in excretion of the dye.

Procedure: For every kilogram of body

weight, 2 milligrams of dye are injected intravenously. After 30 minutes withdraw blood from opposite arm. The amount of dye present in the serum is then estimated. In normal individuals the liver will remove practically all of the dye in 30 minutes.

2. Van den Bergh Test: This test is of value in differentiating Bilirubinate from Bilirubin. Erlich's Diazo reagent added to Bilirubinate gives the direct Van den Bergh reaction, and indicates obstructive jaundice. Bilirubin gives this reaction only after the addition of alcohol to the serum, and this reaction, which is the so-called Indirect Van den Bergh, is seen in hemolytic icterus.

3. **Icerus Index:** Is merely a convenient, arbitrarily selected manner of expressing the degree of jaundice. When there is visible scleral jaundice the icterus index is at least 12. It must be remembered that the yellow pigment of carrots (carotene) may give a false reading.

4. **Galactose Tolerance Test:** This test is a quantitative test of liver function, and depends on the ability of the liver to convert this sugar into glycogen.

The test is performed as follows: After fasting since the previous night, 40 gms. of galactose in water is given orally. Urine is collected hourly for 5 hours, and the amount of sugar present is determined by Benedict's Quantitative method. Normally all the galactose is utilized and up to 3 gms. may be excreted in the urine. When the liver function is impaired, less galactose will be utilized, and hence more than 3 gms. will be excreted in the urine. If the patient has diabetes, the test is not reliable.

5. **Takata Ara:** This test appears to depend upon an alteration in the serum proteins in cirrhosis of the liver. The test is performed by adding bichloride of mercury and sodium carbonate to serial dilutions of serum. The reaction is read at the end of $\frac{1}{2}$ hour and at end of 24 hours. There should be a flocculant precipitate in at least 3 tubes if it is positive.

6. **Prothrombin Time:** According to Quick, this test is a measure of liver function. Since the assimilation and absorption of Vitamin K is dependent upon bile, any interference with the elaboration and flow of bile will prolong the prothrombin clotting time of the blood.

7. **Hippuric Acid Test:** Is of great value in determining the degree of liver damage. It can be carried out at any time of the day and there are no contra-indications. Multiple tests will aid in following the course of liver disease. If the process is progressive this test will show decreasing amounts of hippuric acid excretion in the urine.

This test is performed by giving the patient 6 gms. of sodium benzoate in a glass of water. The bladder is then emptied and all

the urine thereafter for 4 hours is saved. An aliquot portion of the urine is then acidified with hydrochloric acid and allowed to stand for 1 hour, with occasional stirring. Hippuric acid will precipitate out in the form of needle-shaped crystals. The specimen is filtered and the crystals dried, weighed, and the total amount computed. This value is multiplied by 0.68 to change hippuric acid to benzoic acid. In the normal individual, 3 gms. of benzoic acid should be excreted in 4 hours.

8. **Urobilinogen:** Bile pigment in the colon is changed to urobilin by putrefactive bacteria, and absorbed into the portal circulation. Some of this pigment is excreted into the urine as urobilinogen. In hepatic disease the liver fails to store this pigment, and urobilin enters the circulation and may be excreted in large amounts in the urine. If there is complete obstruction of the common bile duct, no bilirubin enters the intestines, and therefore the urine will not contain urobilinogen. This test is of most value when carried on from day to day and the results compared.

9. **Azorubin S Test** (Rosenberg & Soskin, Arch. Int. Med. 1644, Mar. 1940): This is one of the newer tests and one which depends upon the absorption of Azorubin S from the blood and its excretion into the bile. The test does not appear to be any more accurate than some of the tests in use now, and is not practical for routine use. It is carried out as follows: After an overnight fast, a narrow tube is passed into the duodenum and its position determined with the fluoroscope. When bile begins to flow, 4 cc. of a sterile 1% aqueous solution of Azorubin S is injected intravenously. Five minutes later 40 cc. of 25% aqueous magnesium sulphate is administered through the tube. The duodenal contents are collected in separate tubes at $\frac{1}{2}$ minute intervals, and the time elapsing between the injection of the dye and the appearance of a deep red color is designated as the appearance time. The normal appearance time is 15-30 minutes.

In our experience, the best single method of determining liver function has been the hippuric acid test. Some of the other tests mentioned above may be used for further information, especially as regards diagnosis.

Oral Cholecystography

By LANGDON T. THAXTER, M. D., and JACK SPENCER, M. D., Portland, Maine

There are many patients who give a history of repeated attacks of gallbladder colic with its characteristic radiation establishing a clear-cut diagnosis of cholecystitis and cholelithiasis. However, there are some cases which are not characteristic. Oral cholecystography has proven of considerable help in establishing the diagnosis of gallbladder disease, not only in cases with symptoms suggesting gallbladder disease, but also in cases in which the diagnosis was not even suspected.

TECHNICAL FACTORS

Cholecystography is not 100% perfect. There is no test which is. There are certain prerequisites which must be observed in doing this examination which will decrease the chance of error. It is most important that confusing gas and soft tissue shadows be eliminated from the gallbladder region. To best accomplish this, in the majority of cases, we advise castor oil in the afternoon. The following day a plain film of the right abdomen is taken. The patient is given a complete set of printed instructions, which are carefully explained to him. A light lunch is allowed, and the dye is taken according to the instructions at 1.00 P. M. A fat-free supper is taken, and the second bottle of dye is taken at 7.00 P. M. The patient is kept on a fat-free diet, and reports to the X-ray Department at 8.30 A. M. the following day. The first film is taken. If there is satisfactory filling, a fatty meal is ingested, and a film taken one hour after eating. A patient with a good history of gallbladder colic, who shows normal filling, should have an upright Bucky film or a spot film of the gallbladder taken after the gallbladder is localized fluoroscopically. Thus it is often possible to demonstrate small stones or even cholesterol crystals.

DATA

We have taken one hundred consecutive cases which have had a cholecystectomy and correlated the operative and pathological

findings with the X-ray findings. There were twenty-six cases in which no X-ray studies were made, and at operation eighteen of these cases were found to have gall stones. There were twenty-three cases which had a localized film of the gallbladder region only. Seven of these showed stones. Eight did not show stones, and no stones were found at operation; and there were eight other cases which did not show stones, and stones were found at operation. There was one case showing a stone, which was found in the common duct. Examination was listed as "unsatisfactory" in two cases. The data is tabulated according to Charts I and II.

CHART I

Roentgen Ray Findings Confirmed By Operation

Normal visualization without stones	6
Normal visualization with stones	6
Faint to poor visualization without stones	4
Faint to poor visualization with stones	5
Non-visualization without stones	20
At operation stones were found	14
Non-visualization with stones	3

CHART II

Pathological Findings Not Demonstrated By X-ray

Gangrene of gallbladder:	
With stones	3
Without stones	1
Acute gallbladder with abscess	1
Hydrops of gallbladder	1
Carcinoma of head of the pancreas	2
Carcinoma of the gallbladder	1

There were fifty-two of the operative cases with complete operative and X-ray data. The cases showing normal visualization without stone were confirmed at operation, and those reported to contain stones were found at operation. The group with faint to poor visualization without stone have to be evaluated more carefully; and, in this group, the symp-

toms have to be correlated with the cholecystographic findings. There was one error in this group. In case of any discrepancy, the test should be repeated either orally or by the intravenous method. The group with non-visualization will usually give a good gallbladder history. There was one case reported with non-visualization of the gallbladder with stones, and stones were not found at operation.

Often the plain gallbladder film will show positive stones. One must be very guarded in assuming right upper quadrant calcifications are in the gallbladder. Shadows in the right upper abdomen must be differentiated from calcifications in the ribs and pleura; stones in the intestine, liver, kidney and gallbladder, and should be localized when possible.

There was one case in this group in which the gall stone had perforated through into the gastro-intestinal tract and caused an intestinal obstruction.

The following cases illustrate the difficulties in localization of right upper quadrant calculi:

Case 1. H. G. H. Hospital No. 14413. History of right renal colic. A 3 millimeter calculus was demonstrated in the right renal pelvis. The patient had a history of previous attacks of right upper abdominal pain, and Graham-Cole studies revealed multiple calculi in the gall bladder. Cholecystectomy was done, and at a later date the patient was re-admitted for removal of the kidney stone.

Case 2. I. S. X-ray No. 22616. The patient was admitted with a history of intestinal obstruction, which was demonstrated by X-ray examination. At operation a large gall stone was found in the upper jejunum.

Case 3. L. S. Hospital No. 8826. The patient was admitted to the hospital with a history of upper abdominal pain, beneath the right costal space, of one days' duration. The pain was intermittent and radiated across the

back. X-ray examination revealed in the right upper abdomen, somewhat laterally, a 2 by 1 cm. concentric ring. Graham-Cole test was advised for localization, and the area was demonstrated outside the gall bladder. The patient was operated upon, and a retrocecal abscess drained. The appendiceal concretion was discharged through the draining sinus.

DISCUSSION

Visualization of the gallbladder is dependent upon four factors: namely, absorption of the dye from the gastro-intestinal tract; the secretion of the dye by the liver; patency of the cystic duct; and the gallbladder must be able to concentrate the dye. Any condition which may interfere with the absorption of the dye, such as a gastric or duodenal lesion, may interfere with filling of a normal gallbladder. We know that psychic factors, or even a headache, will interfere with gastro-intestinal motility; hence, it seems likely that altered physiological conditions may interfere with the dye absorption and concentration. Two cases seen recently showed no filling of the gallbladder, and at operation were found to be normal. In one of these cases there was demonstrated a leiomyoma of the stomach, and the other had a penetrating duodenal ulcer.

SUMMARY

Oral cholecystography is of value in establishing the diagnosis of gallbladder pathology.

There are certain technical factors which must be observed if the test is to be depended upon. The upright film of the gallbladder is helpful in localizing small stones.

Possible errors in localization of right upper quadrant calculi are considered. (Cases 1 and 2).

Factors concerned in the filling of the gallbladder are presented and possible causes of non-filling of a normal gallbladder discussed. In obscure cases it is necessary not only to examine the gallbladder, but also the upper gastro-intestinal tract before concluding as to the nature of the pathological process.

History and Symptoms

RICHARD S. HAWKES, M. D., Portland, Maine

The case histories of 105 consecutive patients upon whom cholecystectomy was performed at the Maine General Hospital during 1940 and the years immediately preceding have been received and analyzed. The statistics obtained from his study have brought to light a few facts which, it is thought, are worthy of mention.

The operation was performed on 16 males (15%) and 89 females (85%). The distribution by age at the time of operation was as follows:

Age	Males	Females
10-19	0	3
20-29	0	11
30-39	4	19
40-49	4	27
50-59	2	13
60-69	4	11
70-79	2	4

The youngest male was 34, the oldest 75. The youngest female was 16, the oldest 77.

The age at onset of symptoms which led up to operation is quite probably inaccurate in individual cases, but the number of patients gives the figures some value:

Age at Onset of Symptoms	Males	Females
10-19	0	6
20-29	0	18
30-39	7	16
40-49	1	17
50-59	2	11
60-69	4	8
70-79	2	3

Of this group of 89 women, 71½% had definite gall bladder symptoms before the age of 20 and 30% before the age of 30. Three of the 89 had their cholecystectomies before they were 20 years old.

The earliest age at onset of symptoms in men was 33; in women 16. At the other extreme one man did not complain of symptoms suggestive of gall bladder disease until age 74, and one woman until age 77.

The duration of the presenting complaint prior to hospital entry was exceedingly variable as shown in the following table:

Duration of Symptoms Before Entering Hospital	Males	Females
1 day or less,	2	1
1 day to 1 week,	1	7
1 week to 1 month,	1	5
1 month to 1 year,	6	19
1 year to 5 years,	6	30
5 years to 20 years,		13
Over 20 years,		3
No symptoms,		1
Not stated,		10

The symptoms of gall bladder disease noted in these 105 case histories were limited to attacks of epigastric or right upper quadrant pain with or without nausea and vomiting, jaundice, flatulence, and intolerance to fats. Not all these were recorded in every case, yet an analysis of these symptoms is of some interest:

Attacks of Epigastric or RUQ pain, nausea and vomiting:

	Cases
All 3,	60% = 63
Pain and nausea,	5
Pain without nausea or vomiting,	12
Pain alone mentioned,	15
Pain and nausea unassociated,	2
Right lower quadrant pain,	1
Nausea alone,	1
No pain, nausea, or vomiting,	1
Loss of weight only,	1
Pain, nausea, and vomiting not recorded,	3

Jaundice varying from a yellow tint in the skin or sclerae to frank jaundice was mentioned in the history of the present illness 26 times or 25%. It was recorded 4 times when the final diagnosis was simply chronic cholecystitis.

The presence or absence of flatulence was stated 57 times. Forty-six had it. Eleven denied it.

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The President's Page

To the Members of the Maine Medical Association:

Since writing my last page for the JOURNAL, many things of interest to our members have taken place. First, I would mention the Clinical Session in Portland. The Clinics were very well attended, and I want to take this opportunity of thanking the Cumberland County Society for the excellent program they gave us.

Next, I attended the New England Post Graduate Assembly in Cambridge. The program was excellent and well carried out. About 500 registered for the meeting, and I am glad to tell you that over 50 of those were from Maine. The subjects were appropriate and well handled. I have also attended several County Society Meetings, and was very pleased to see the interest taken in the affairs of the State Society.

At present, we are working on a fee schedule for State relief cases and hope to reach a workable agreement with Mr. Earnest, Commissioner of the State Department of Health and Welfare. There is some talk of an insurance plan to cover Medical fees, similar to the Blue Cross plan of Hospital insurance. Let me have some opinions as to the advisability of such a plan.

Don't forget, the Maine Medical Association meets at Poland Spring in June, 1942. Plan to go and make it the best meeting in our history.

Wishing you all a MERRY CHRISTMAS and a HAPPY and PROSPEROUS NEW YEAR.

P. L. B. EBBETT, M. D.,

President, Maine Medical Association.

Editorial

Christmas Seals

A young man employed in the manufacture of machine guns made the remark that no matter how truly wonderful the weapons were, no matter how remarkable the technical skill that resulted in their being the thought constantly occurred to him; they are being made to kill some one. In a world torn by dissension, filled with hatred and where armed robbery and piracy are employed in an effort to destroy everything that many millions of human beings hold sacred these little tokens surely must bring a message only too needed and welcome. No one knows better than the profession of medicine and its allied workers that the dread white plague must be faced, as an aftermath of this hideous war, as an enemy to be fought with all possible skill. Not with machine guns; not with tanks; not with bombers flying above the sight of man and delivering their loads of death and destruction; surely not by so-called oratory or the calling of names but by the methods that time and experience have shown to be truly efficient. Millions and millions of human beings in Europe are without homes and sufficient clothing; how many are merely existing on nothing more or less than a "veritable tuberculosis diet" no one knows and the end is not yet.

State and National Anti-tuberculosis Associations have for many years waged a fight against this disease with results well known to those in a position to appreciate the truly wonderful results. They fought the fight when at times it seemed as if the efforts were not worth while. What was obvious to be done, by those in a position to know, was oftentimes met with indifference, suspicion and actual hostility. Christmas seals will help in a most tangible form. They will furnish some of the money needed to carry on the

work and the work must be carried on as never before.

To be fought successfully tuberculosis must be diagnosed *early*, not when the clinical signs and conditions are pitifully obvious, and above all in contact or suspicious cases those measures of prevention instituted that Charles B. Sylvester has called attention to, sometimes on deaf ears, and which mean so much. Unfortunately a specific cure for tuberculosis, in most forms, does not exist but specific methods of prevention constitute one of the most important efforts that can be made. Perhaps the statement may seem a bit biased but it does seem in many, many ways Maine is most fortunate in its anti-tuberculosis setup. It is a pleasure to commend and be grateful for the help so willingly given by the skilled workers in this disease directing our State sanatoria. We talk glibly about detecting the disease in the pulmonary types *early* when the signs are minimal. Clinical signs and symptoms may be suspicious but the clinching facts in diagnosis are possible only by *properly* taken and *correctly* interpreted X-ray films. Most fortunately we have men at our command competent and only too willing to perform this essential task.

For years the various district anti-tuberculosis nurses have brought to their job a persistency and loyalty the results of which cannot be set down in statistics or results. We owe these faithful workers no little in the successful fight against this disease so in order that their work may go on, efficiently and without let-up, let us each and every one contribute to the best of our means and abilities. The Maine Medical Association endorses most heartily all efforts in this campaign so again let the little stamps carry far and wide the message they signify: construction not destruction.

County News and Notes

Cumberland

Portland Medical Club

The regular monthly meeting was held at the Columbia Hotel, Tuesday evening, November 4, 1941, with Dr. M. C. Webber presiding. There were 39 members and four guests present.

Dr. Leo J. McDermott was elected to membership.

The following committees were appointed by the President:

Nominating Committee: Dr. L. T. Thaxter, Chairman, Dr. F. A. Smith, Dr. J. R. Hamel.

Banquet Committee: Dr. R. L. Huntress, Chairman, Dr. T. A. Martin, Dr. A. A. S. Whittier.

The members of the Club were much pleased to welcome Dr. E. H. Drake as the speaker of the evening. He chose *Syncope* for his subject. He gave a very clear outline and discussion of the various causes of syncope and, in closing, gave case reports to illustrate some of these factors. Dr. E. H. Gehring, Dr. D. H. Daniels, Dr. F. A. Smith, Dr. E. A. Greco, Dr. E. E. O'Donnell and Dr. H. Sulkowitch participated in the discussion.

Following the meeting, light refreshments were enjoyed.

Respectfully submitted,

ALICE A. S. WHITTIER,
Secretary.

Kennebec

A meeting of the Kennebec County Medical Association was held at the Sisters Hospital, Waterville, Maine, November 13, 1941.

The Clinical Session at 5.00 P. M., at which the following cases were presented, was presided over by Ivan E. McLaughlin, M. D., President:

1. A case of Acute Leukemia—O. F. Pomerleau, M. D.

2. A case of Intussusception in a Child, and Death—Moses F. Lubell, M. D.

3. A case of Hydatid Mole—B. O. Goodrich, M. D.

4. A case of Pellagra—Harvey Doe, M. D.

5. Coarctation of Aorta—John O. Piper, M. D.

6. Polycythemic Vera—Theodore E. Hardy, M. D.

7. Lung Abscess Secondary to Esophageal Diverticulum—Frederick T. Hill, M. D.

Dinner at 6.30 P. M. was followed by a business meeting. Minutes of the last meeting were read and approved. The application for membership

by Celia Hirschberger, M. D., of Waterville, Maine, was received and referred to the Council.

The speaker of the evening was Terry M. Townsend, M. D., Director of Urology in the Hospitals of the Department of Correction, New York City; Director of Urology in the Lutheran Hospital of Manhattan; Consulting Urologist to Morrisania City Hospital, The Midtown Hospital, the Community Hospital, Sing Sing Prison Hospital and the Ossining Hospital. Doctor Townsend gave a most interesting discussion on *The Relief of Prostatic Urinary Retention*. Doctor Thomas M. Mulcahey, Associate of Doctor Townsend, gave an illustration of the method used in urethral resection.

Respectfully submitted,

JAMES E. POULIN, M. D.,
Acting Secretary.

Oxford

The annual meeting of the Oxford County Medical Society was held at Bethel Inn, Bethel, Maine, October 21, 1941.

The following officers were elected for the ensuing year:

President, Albert P. Royal, Rumford.

Vice-President, Johnson L. Bean, Norway.

Secretary-Treasurer, J. S. Sturtevant, Dixfield.

Councilors: H. M. Howard, Rumford; L. M. Corliss, West Paris; R. R. Tibbetts, Bethel.

Delegates to the annual session of the Maine Medical Association: R. E. Hubbard, Waterford, and D. E. Elsemore, Dixfield.

Alternates: W. G. Dixon, Norway, and J. A. MacDougall, Rumford.

Homer E. Lawrence, M. D., of Bethel was elected to membership.

After dinner at 6.30 P. M., Doctor Bentley Colcock of the Lahey Clinic, Boston, gave a very interesting and instructive lecture on *Problems in Gynecology*.

J. S. STURTEVANT, M. D.,
Secretary.

Penobscot

The annual meeting of the Penobscot County Medical Association was held at the Bangor House, Bangor, Maine, on Tuesday, November 18, 1941, following a dinner at 6.30 P. M.

Your Membership Expires December 31st

The letter from the Secretary of the Maine Medical Association relative to the proposed fee schedule for state relief cases was read. On motion made and duly seconded, it was voted to table consideration of the schedule until further discussion could be had and further information be obtained from the State Officers of our Association.

Elected to membership: Carl W. Ruhlin, M. D., of Bangor, by transfer from the Cumberland County Medical Society, and Domenico Santoro, M. D., of Millinocket.

The report of the Secretary showed a membership of 87. Eight meetings were held during the past year with an average attendance of 47. Five members have entered military service.

The report of the Treasurer showed all bills paid and a small working balance in the treasury.

The report of the Nominating Committee was presented and the following officers elected for the coming year:

President, Albert W. Fellows, Bangor.

Vice-President, Ernest T. Young, Millinocket.

Secretary-Treasurer, Forrest B. Ames, Bangor.

Board of Censors: W. A. Purinton, Chairman, P. S. Skinner, W. J. Comeau.

Delegates to the 1942 annual session of the Maine Medical Association: F. B. Ames, Bangor; H. C. Knowlton, Bangor; E. T. Young, Millinocket; and F. D. Weymouth, Brewer. Alternates: A. C. Strout, Dexter; M. C. Maddan, Old Town; H. E. Thompson, Bangor; and C. E. Blaisdell, Bangor.

The paper of the evening was read by Maurice Fremont-Smith, M. D., Associate Physician at the Massachusetts General Hospital, Boston, Massachusetts. His subject was *Dysmenorrhea*.

The President, E. P. Goodrich, of Winterport, presided.

The attendance was 48.

FORREST B. AMES, M. D.,
Secretary.

Washington

A meeting of the Washington County Medical Society was held on October 28, 1941, at the Congregational Church in Machias, Maine.

The meeting was called to order by Dr. P. J. Mundie of Calais, Maine. Minutes of the last meeting were read and approved.

After a very fine dinner, served at 6.00 P. M., the guest speaker of the evening, Dr. Richard Buck of Boston, spoke on *Hypertension*. This proved to be a most interesting and instructive lecture. A general discussion followed the talk.

A business meeting was held after the address by Doctor Buck. It was voted that the next meeting be held in January or February and the time and place be designated by the officers.

The schedule of fees for state relief cases suggested by a Special Committee of the Maine Medical Association and the Department of Health and Welfare were read and approved, and the Society voted that approval of same be sent to Doctor Carter.

It was voted that a letter of thanks be sent to Dr. E. H. Bennett of Lubec for his interest in the society affairs.

Joseph Cappello, M. D., of Lubec, and Donald R. Jacob, M. D., of Princeton, were elected to membership.

There were sixteen members and guests present.

Respectfully submitted,

JAMES C. BATES, M. D.,
Secretary.

York

The quarterly meeting of the York County Medical Society was held at the Kennebunk Inn, Kennebunk, Maine, October 22, 1941.

Dinner was followed by a business meeting. A uniform rate of fees for the General Practitioner was adopted by the Society. It was voted to have the annual meeting in Biddeford with Drs. W. T. Roussin, J. R. LaRoche and P. S. Hill, Jr., on the Committee.

Stephen A. Cobb, M. D., of Sanford, Councilor for the First District, gave a short summary.

The speaker of the afternoon was Capt. Robert R. Parsons, M. C. (U. S. N.), whose subject was *Modern Concepts on Gonorrhea*. Captain Parsons invited all the members to the meeting at the Naval Hospital, in the Navy Yard, Kittery, Maine, the first Tuesday in November.

Other guests present were J. L. Pepper, M. D., District Health Officer of Maine, and 2nd Lieut. DeCicco, M. C. (U. S. N.). There were sixteen members present.

C. W. KINGHORN, M. D.,
Secretary.

New Members

Oxford

Homer E. Lawrence, M. D., Bethel, Maine.

Penobscot

Carl W. Ruhlin, M. D., 268 State Street, Bangor, Maine. (By transfer from the Cumberland County Medical Society.)

Domenico Santoro, M. D., Millinocket, Maine.

Washington

Joseph Cappello, M. D., Lubec, Maine.

Donald R. Jacob, M. D., Princeton, Maine.

Coming Meetings

Kennebec County Medical Association

Frederick R. Carter, M. D., Augusta,
Secretary.

December 18, 1941—Augusta State Hospital,
Augusta.

**Pay Your 1942 State and County Dues Promptly
to Your County Secretary**

Notices

Relief Wings, Inc.

There is now being projected throughout the United States a humanitarian air service to provide suitable airplanes which will transport Flight Surgeons, Flight Nurses, medical supplies, and relief workers quickly to major disasters resulting from peace time catastrophies of nature, or from possible ravages of war. It has been found that the airplane is most essential, not only from the viewpoint of speed, but also to reach inaccessible regions or areas isolated by destruction of roads and ground transportation.

At the present time, half the United States has a framework established for Relief Wings Service. In order to meet any major disaster or national emergency, it is necessary that it secure enrollment of Flight Surgeons, Aircraft Owners, Pilots and Flight Nurses at once.

Any M. D., in good standing, with good reputation, and willing to give one day per year for service for a practice mobilization, will be acceptable, and may make application for Volunteer Flight Surgeon Service.

The Obligation is as follows:

"I hereby apply for volunteer service as a Flight Surgeon to be called at any time by Relief Wings for actual civilian disaster relief, for emergency relief cases, or for drill practice. If I am accepted, I hereby agree to respond immediately (providing at the time the call is received I am not out of town operating or on a case) for a minimum of two days of my time per year and without, thereunder, any obligation or liability, financial or otherwise, on the part of Relief Wings, Inc., for my time, for my absence from other responsibilities or for any possible death or any injury which might result to myself, my dependents, or my property. It is also hereby understood that, if response to a Relief Wings call would entail great inconvenience on my part, no liability should be attached to my failure to appear, other than possible dropping of my name from the volunteer list."

Any doctor in Maine, interested, may get further information by writing to Sumner C. Andrews, M. D., 636 Beacon St., Boston, Massachusetts, Captain of North Atlantic Section, or Stephen A. Cobb, M. D., Sanford, Maine, Captain of the Maine Group.

Panel Discussions Available to County Medical Societies

The following Panel Discussions have been made available for presentation before County Medical Societies by the Committee on Graduate Education:

1. Coronary Disease—E. H. Drake, M. D., Portland, Chairman.
2. Complications of Pregnancy—R. B. Moore, M. D., Portland, Chairman.
3. Disease of the Liver and Bile Passages—J. Gottlieb, M. D., Lewiston, Chairman.
4. Endocrine Dysfunction — James Carswell, M. D., Camden, Chairman.
5. Syphilis—O. R. Johnson, M. D., Portland, Chairman.
6. Chemotherapy—F. T. Hill, M. D., Waterville, Chairman.
7. Appendicitis—I. M. Webber, M. D., Portland, Chairman.

Application for these panels should be made to the Chairman one month in advance.

Staff Meetings — Thayer Hospital, Waterville, Maine

Staff meetings are held every Thursday evening at 7.30 at the Thayer Hospital, except for the third Thursdays from September to May inclusive, when they are omitted because of the meeting of the Kennebec County Medical Association. The Profession is cordially invited to attend these meetings. In addition to clinical case studies, special features are included in certain of the programs, such as panel discussions, guest speakers, etc.

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Mortimer Warren, M. D.*
- Waterville:** *Sisters Hospital*
1st & 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
Thayer Hospital
2nd & 4th Thursdays, 10.00 A. M.
Director, *E. H. Risley, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Millinocket, Old Town, Portland, Presque Isle, Rockland, Rumford, Sanford, Waterville, Wilton, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

The American College of Physicians Announces Its Twenty-sixth Annual Session to Be Held in St. Paul, Minn., April 20-24, 1942

Dr. Roger I. Lee, of Boston, is President of the College, and will be in charge of the program of General Sessions and Lectures. Dr. John A. Lepak, of St. Paul, has been appointed General Chairman, and will be in charge of the program of Hospital Clinics and Round Table Discussions, as well as local arrangements, entertainment, etc. Mr. Edward R. Loveland, Executive Secretary of the College, 4200 Pine Street, Philadelphia, will have charge of the general management of the session and the technical exhibits.

American Urological Association Offers Award

"Urology Award: The American Urological Association offers an annual award 'not to exceed \$500.00' for an essay (or essays) on the result of some specific clinical or laboratory research in Urology. The amount of the prize is based on the merits of the work presented, and if the committee on Scientific Research deem none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years.

Essays shall be in the hands of the Secretary, Dr. Clyde L. Deming, 789 Howard Avenue, New Haven, Conn., on or before April 1, 1942."

Examinations American Board of Obstetrics and Gynecology

The written examination and review of case histories (Part I) for Group B candidates will be held in the various cities of the United States and Canada, on Saturday, January 3, 1942, at 2.00 P. M. Formal notice of the place of examination will be sent each candidate several weeks in advance of the examination date. No candidate will be admitted to examination whose examination fee has not been paid at the Secretary's Office. Candidates who successfully complete the Part I examination will proceed automatically to the Part II examination held in June, 1942.

The general oral and pathological examinations (Part II) for all candidates (Groups A and B) will be conducted by the entire Board, meeting at Atlantic City, N. J., in June, 1942, immediately prior to the annual meeting of the American Medical Association.

Application for admission to Group A, Part II, examinations must be on file in the Secretary's Office not later than March 1, 1942.

As previously announced in the Board booklet, this fiscal year (1941-1942) of the Board marks the close of the two groups of classification of applicants for examination. Thereafter, the Board will have only one classification of candidates, and all will be required to take the Part I examinations.

For further information and application blanks, address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

The Platform of the American Medical Association

The American Medical Association advocates:

1. The establishment of an agency of the federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need, for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical

Allergy Forum

The Fourth Annual Forum on Allergy will be at Detroit, Michigan, January 10 and 11, 1942.

The Borden Company Acquires Muller Laboratories

The Borden Company has acquired The Muller Laboratories of Baltimore, Md., producers of Mull-Soy, a milk substitute in fluid form for use in diets of persons allergic to the proteins of cow's milk.

The laboratories will be operated under the direction of the Prescription Products Department of The Borden Company and will continue under the management of Dr. Julius F. Muller.

Mull-Soy, which is sold in drug stores on the recommendation of physicians, is in liquid form in tins of 15½ fluid ounces. It is prepared from soybean flour, soybean oil, dextrose, sucrose, calcium and sodium salts. It has been in production since 1936.

Dr. Muller obtained his B. S. degree at Rutgers University in 1922, his M. S. at the same institution in 1928, and his Ph. D., also at Rutgers, in 1930, following a Walker-Gordon Fellowship.

Nailing A Malicious Falsehood

Someone is spreading rumors among our customers that this company is owned or controlled by Sterling Products, Inc., of Wheeling, West Virginia, who have been cited by our government for Nazi affiliations.

That Is A Deliberate Misstatement of Facts

This company has not, and never has had, any connections whatsoever with that concern and it is merely our misfortune that the names are similar.

Our competitors never have been able to match our prices for standard merchandise and they have resented the "free goods" which we offer in addition. Our customers are too solid and loyal to give weight or recognition to such untruthful whisperings.

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services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

Book Reviews

"X-ray Therapy of Chronic Arthritis (Including the X-ray Diagnosis of the Disease)"

*Preliminary Report Based on 100 Patients Treated at
Quincy, Illinois*

By: Karl Goldhamer, M. D., Associate Roentgenologist, St. Mary's Hospital and Quincy X-ray and Radium Laboratories; Formerly Roentgenologist, University of Vienna; Honorary Member, Mississippi Valley Medical Society, etc.

With a Foreword by Harold Swanberg, B. S., M. D., F. A. C. P., Editor, "Mississippi Valley Medical Journal and the Radiologic Review."

With 24 original Illustrations by the author, two roentgenograms, and four tables.

Published by the Radiologic Review Publishing Co., Quincy, Illinois, 1941. Price, \$2.00.

The author of this small book has treated patients suffering with chronic arthritis for twenty years with some success. He now presents this monograph in order to discuss the X-ray diagnosis and treatment of chronic arthritis. The contents of the book dealing with X-ray therapy of arthritis concerns itself with the story of one hundred patients treated and observed during the past twenty-one months at Quincy, Illinois. It represents a preliminary report of X-ray work done on private patients with a single, modern, shock-proof, high voltage apparatus and the results obtained seem to be quite satisfactory so far. Of course, anatomic, physiologic, diagnostic and therapeutic theories and facts are fully discussed throughout the greater part of the book in order to facilitate better understanding of all principles involved.

"The Care of the Aged (Geriatrics)"

By: Malford W. Thewlis, M. D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R. I.; Special Consultant, Rhode Island Department of Public Health.

Third Edition, Entirely rewritten. 50 Illustrations.

Published by The C. V. Mosby Company, St. Louis, 1941. Price, \$6.00.

The first edition of this excellent textbook on Geriatrics appeared in 1919, the second in 1936, and today, as the third edition goes forth to meet the readers of books which concern themselves with the health and welfare of the aged, it is still the only book of its kind in America. As we become more alive to the needs of our aging members of our society, we are beginning to think of ways and means by which we hope to lighten the burden of the aging process and its many complications.

The book is divided into five sections, namely: General Considerations; Medical Problems; Specific Infections; Noninfectious Diseases; Pathologic Conditions in Old Age.

Along with the old-age pension, old-age security legislation, home-making for the aged and the various humane and ennobling movements for the improvement of life's comforts, geriatrics is gradually developing into a medical specialty of considerable importance. The young medical practitioner will find much that is distinctly worth while in "The Care of the Aged."

"A Textbook of Ophthalmology"

By: Sanford R. Gifford, M. A., M. D., F. A. C. S., Professor of Ophthalmology, Northwestern University Medical School, Chicago; Attending Ophthalmologist, Passavant Memorial and Cook County Hospitals.

Illustrated.

Second Edition, Revised.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$4.00.

This edition brings up to date the record of ophthalmologic knowledge acquired and tested since 1938, the year of this text's first appearance. Such therapeutic agents as sulfanilamide, befarin, thiamin chloride and other vitamins are included. Fifteen colored cuts have been added. The chapter on the sclera has been entirely rewritten. The author's chief thought, namely, to provide the medical student and the general practitioner with clear detailed information of modern ophthalmology, has been followed throughout.

"The American Illustrated Medical Dictionary"

A complete Dictionary of the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, Veterinary Science, Biology, Medical Biography, etc., with the Pronunciation, Derivation, and Definition

By: W. A. Newman Dorland, A. M., M. D., F. A. C. S., Lieut.-Colonel, M. R. C., U. S. Army; Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association; Editor of the "American Pocket Medical Dictionary."

Nineteenth Edition, Revised and Enlarged with 914 Illustrations, including 269 Portraits.

With the Collaboration of E. C. L. Miller, M. D., Medical College of Virginia.

Published by W. B. Saunders Company, Philadelphia and London, 1941. Price, \$7.00 plain; \$7.50 indexed.

The American Illustrated Medical Dictionary grows greater and more comprehensive with every new edition. In this, the nineteenth edition, more than 2,000 new words have been added. These additions are incorporated into all departments of medicine and related sciences. The medical student and practitioner will find hundreds of new terms defined for the first time. It is the greatest book of its kind.

*(Gall Bladder Symposium)**Continued from page 282*

Intolerance to fats was observed in 38 cases. Sixteen times it was denied and in the other case histories not mentioned.

Stones were found in 77 of the gall bladders removed. So far as it was possible to determine from the histories read, the symptoms were just as severe when stones were *not* present at operation.

CONCLUSION:

The histories of 105 patients subjected to cholecystectomy have been analyzed as to age and the development of symptoms.

A single striking fact was brought out in this survey, namely that gall bladder disease is frequently found in women before the age of 20.

A golf pest pestered every one he could get to listen for advice how to swing. One patient sufferer advised: Shut your eyes, swing and hope for the best.

A small boy whose mother firmly believed in a daily bath for him had his first day at school. He remonstrated at having to return and on being questioned as to his reason said that he was nothing but a sissy. You make me take a bath every day and then put powder on me and I want to smell just like the other boys.

During the national emergency we will either make great gains or suffer great losses in our fight against tuberculosis. The gains will come from the chest X-ray examination that will be given the young men entering military service . . . the real losses will come if industry does not adopt the practice of X-raying employees. The massing of labor in concentrated areas creating crowded living conditions, increased mental, emotional and physical strain—inevitable by-products of industrial defense activities—are factors which increase and spread tuberculosis.—KENDALL EMERSON, M. D.

For the local Treatment of Acute Anterior Urethritis
(DUE TO NEISSERIA GONORRHEAE)



A complete technique of treatment and literature will be sent upon request

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by *Neisseria gonorrhoeae*.¹ An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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VOLUME THIRTY-TWO

THE JOURNAL
of the
MAINE MEDICAL ASSOCIATION



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1941-1942

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